



Sequence Listing

<110> FREDERIC J. DESAUVAGE  
GRETCHEN FRANTZ  
KENNETH J. HILLAN  
PAUL POLAKIS  
ANDREW POLSON  
VICTORIA SMITH  
SUSAN D. SPENCER  
THOMAS D. WU  
ZEMIN ZHANG

<120> COMPOSITIONS AND METHODS FOR THE DIAGNOSIS AND  
TREATMENT OF TUMOR

<130> P5026R1-US

<140> US 10/643,795

<141> 2003-08-19

<150> US 60/404,809

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<150> US 60/426,847

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<151> 2003-07-02

<160> 158

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<211> 1870

<212> DNA

<213> Homo sapien

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<211> 731

<212> DNA

<213> Homo sapien

<220>

<221> Unsure

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<223> Unknown base

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<212> DNA

<213> Homo sapien

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<211> 2459

<212> DNA

<213> Homo. sapien

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<223> Unknown base

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<211> 2877

<212> DNA

<213> Homo sapien

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<211> 1926

<212> DNA

<213> Homo sapien

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<211> 1282

<212> DNA

<213> Homo sapien

<220>

<221> Unsure

<222> 898, 1187, 1198, 1241, 1262, 1266, 1277, 1281

<223> Unknown base

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<213> Homo sapien

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<210> 11

<211> 2290

<212> DNA

<213> Homo sapien

<220>

<221> Unsure

<222> 11, 30, 39, 45

<223> Unknown base

<400> 11

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<213> Homo sapien

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<210> 13

<211> 3604

<212> DNA

<213> Homo sapien

<220>

<221> Unsure

<222> 3505, 3583

<223> Unknown base

<400> 13

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<212> DNA

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<211> 3416

<212> DNA

<213> Homo sapien

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<213> Homo sapien

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 <213> Homo sapien

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 <223> Unknown base

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<213> Homo sapien

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 <212> DNA  
 <213> Homo sapien

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<211> 4492

<212> DNA

<213> Homo sapien

<400> 49

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<223> Unknown base

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<212> DNA

<213> Homo sapien

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<211> 1312

<212> DNA

<213> Homo sapien

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<211> 4725

<212> DNA

<213> Homo sapien

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 <212> DNA  
 <213> Homo sapien  
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 <212> DNA  
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<210> 63

<211> 2549

<212> DNA

<213> Homo sapien



<400> 63

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<211> 1059

<212> DNA

<213> Homo sapien

<400> 64

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<210> 65

<211> 1475

<212> DNA

<213> Homo sapien

<220>

<221> Unsure

<222> 1391, 1399, 1418, 1421, 1431, 1446, 1449, 1456, 1463, 1469

<223> Unknown base

<400> 65

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<211> 2249  
<212> DNA  
<213> Homo sapien

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<210> 67

<211> 3171

<212> DNA

<213> Homo sapien

<400> 67

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<400> 72

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<213> Homo sapien

<400> 74

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 tgggtggggc ggcacgggcg gggactgtcc cggcggcaaa ggcaagagca 350  
 tcaactgctc agaattaaat gtgagggagt ctgacgtaag agtttgtgat 400  
 gagtcatcat gtaaatatgg aggagtctgt aaagaagatg gagatggttt 450  
 gaaatgtgca tgccaatttc agtgccatac aaattatatt cctgtctgtg 500  
 gatcaaattg ggacacttat caaaatgaat gctttctcag aagggtgct 550  
 tgtaagcacc agaaagagat aacagtaata gcaagaggac catgctactc 600  
 tgataatgga totggatctg gagaaggaga agaggaaggg tcaggggcag 650  
 aagttcacag aaaacactcc aagtgtggac cctgcaaata taaagctgag 700  
 tgtgatgaag atgcagaaaa tgttgggtgt gtatgtaata tagattgcag 750  
 tggatacagt tttaatcctg tgtgtgcttc tgatgggagt tcctataaca 800  
 atccctgttt tgttcgagaa gcatcttgta taaagcaaga acaaattgat 850  
 ataaggcatc ttggtcattg cacagatata gatgacacta gtttgttggg 900  
 aaagaaagat gatggactac aatatcgacc agatgtgaaa gatgctagt 950  
 atcaaagaga agatgtttat attggaaacc acatgccttg ccctgaaaac 1000  
 ctcaatggtt actgcatcca tggaaaatgt gaattcatct atctactcag 1050

aagggttct ttagatgtg aatctggcta cactggacag cactgtgaaa 1100  
agacagactt tagtattctc tatgtagtgc caagtaggca aaagctcact 1150  
catgtttctta ttgcagcaat tattggagct gtacagattg ccatcatagt 1200  
agcaattgta atgtgcataa caagaaaatg ccccaaaaac aatagaggac 1250  
gtcgacagaa gcaaaaccta ggtcatttta cttcagatac gtcacccaga 1300  
atggtttaaa ctgatgactt ttatatgtac actgaccatg tgtatgtaca 1350  
tttattatgt ctttttttaa agaattggaaa tattttatttc agaaggcctt 1400  
atTTTTggac atTTTTatagt gtagtactgt tggctcgata tttgaatatt 1450  
cagctacgac agTTTTggac tgttttagtag tctttgtttt atgtTTTTaa 1500  
atacagaat tgcttcacaa atttgtacca catggtaatt ctaagacttg 1550  
ttctttaccc atggaatgta atatttttgc aaagatggac tacttcacaa 1600  
atggttataa agtcatatcc acttcttcca caatgaccac agcaaatgac 1650  
ccaagcatga actaaagaag ag 1672

<210> 81  
<211> 2091  
<212> DNA  
<213> Homo sapien

<400> 81  
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aggagcccg aaccacccc gacgcctcag cccaagaatt aaatgtgagg 100  
gagtctgacg taagagtttg tgatgagtca tcatgtaaat atggaggagt 150  
ctgtaaagaa gatggagatg gtttgaaatg tgcattgcaa tttcagtgcc 200  
atacaaatta tattcctgtc tgtggatcaa atggggacac ttatcaaat 250  
gaatgctttc tcagaagggc tgcttgtaag caccagaaag agataacagt 300  
aatagcaaga ggaccatgct actctgataa tggatctgga tctggagaag 350  
gagaagagga agggtcaggg gcagaagttc acagaaaaca ctccaagtgt 400  
ggaccctgca aatataaagc tgagtgtgat gaagatgcag aaaatgttgg 450  
gtgtgtatgt aatatagatt gcagtggata cagttttaat cctgtgtgtg 500  
cttctgatgg gagttcctat aacaatccct gttttgttcg agaagcatct 550  
tgtataaagc aagaacaaat tgatataagg catcttggtc attgcacaga 600  
tacagatgac actagtttgt tgggaaagaa agatgatgga ctacaatatc 650

gaccagatgt gaaagatgct agt gatcaaa gagaagatgt ttatattgga 700  
aaccacatgc cttgccctga aaacctcaat ggttactgca tccatggaaa 750  
atgtgaattc atctattcta ctcagaaggc ttcttgtaga tgtgaatctg 800  
gctacactgg acagcactgt gaaaagacag acttttagtat tctctatgta 850  
gtgccaagta ggcaaaagct cactcatgtt cttattgcag caattattgg 900  
agctgtacag attgccatca tagtagcaat tgtaatgtgc ataacaagaa 950  
aatgccccaa aaacaataga ggacgtcgac agaagcaaaa cctagggtcat 1000  
tttacttcag atacgtcatc cagaatgggt taaactgatg acttttatat 1050  
gtacactgac catgtgatgt acatttatta tgtctttttt taaagaatgg 1100  
aaatatttat ttcagaggcc ttatttttgg acatttttag ttagtactg 1150  
ttggctcgta tttagaatat tcagctacga cagttttgga ctgttttagta 1200  
gtctttgttt tatgttttta aatacagaaa ttgctttcac aaatttgtac 1250  
cacatggtaa ttctaagact tgttctttac ccatggaatg taatattttt 1300  
gcaaagatgg actacttcac aaatgggtat aaagtcatat ccacttcttc 1350  
cacaatgacc acagcaaatg accaagcatg aactaaagggt aaagatgttt 1400  
acagattact tttcttaca aaaaaatcta gaagacactg tgtttaaata 1450  
gatatttaaa tgtttttgag atttagtaac tgatttttta gacactgcct 1500  
atcgcatgaa ctgtaaagct gtgtgtatta ggtgtaaaat atttataaga 1550  
tatatggact ggggaatttg attattcctc cctttgaaaa aatagtccta 1600  
ataatttgaa caaatatgtt agtaatgatg gaacagatca atgaaaagta 1650  
gatatagata ttgtgaaaat aggctgttta acaaacagat tggaataaag 1700  
cctattctac cagttaaact actttaatac acattcattt ttaaagaaaa 1750  
tgtttgtttt aacataaata aacaaatcgt atcagtgttt gtgaataaaa 1800  
tacaaaaatg attgttaatg attggtgctc ttaaagttag cttaaaattt 1850  
atccaagacg tatatccaaa tttgtcctgt agtaatagat taatattcat 1900  
agattgttgg tgtttaaaaga tctgaagtgt gagtagaatg tattcagctg 1950  
tttaacatgt agtttagata ttcaaaagta tgcattgtag atttaaaaga 2000  
tatgttaaaa attattaatt ttaatatattt gtttgaaaaa gcatgttata 2050  
atataatgtt ttcactataa agaaaaaaaa aaaaaaaaaa a 2091

<400> 82

155

260	265	270
Pro Thr Phe Leu Phe Leu Leu Tyr Tyr Trp Cys Val Pro Glu Ser		
275	280	285
Pro Arg Trp Leu Leu Ser Gln Lys Arg Asn Thr Glu Ala Ile Lys		
290	295	300
Ile Met Asp His Ile Ala Gln Lys Asn Gly Lys Leu Pro Pro Ala		
305	310	315
Asp Leu Lys Met Leu Ser Leu Glu Glu Asp Val Thr Glu Lys Leu		
320	325	330
Ser Pro Ser Phe Ala Asp Leu Phe Arg Thr Pro Arg Leu Arg Lys		
335	340	345
Arg Thr Phe Ile Leu Met Tyr Leu Trp Phe Thr Asp Ser Val Leu		
350	355	360
Tyr Gln Gly Leu Ile Leu His Met Gly Ala Thr Ser Gly Asn Leu		
365	370	375
Tyr Leu Asp Phe Leu Tyr Ser Ala Leu Val Glu Ile Pro Gly Ala		
380	385	390
Phe Ile Ala Leu Ile Thr Ile Asp Arg Val Gly Arg Ile Tyr Pro		
395	400	405
Met Ala Met Ser Asn Leu Leu Ala Gly Ala Ala Cys Leu Val Met		
410	415	420
Ile Phe Ile Ser Pro Asp Leu His Trp Leu Asn Ile Ile Ile Met		
425	430	435
Cys Val Gly Arg Met Gly Ile Thr Ile Ala Ile Gln Met Ile Cys		
440	445	450
Leu Val Asn Ala Glu Leu Tyr Pro Thr Phe Val Arg Asn Leu Gly		
455	460	465
Val Met Val Cys Ser Ser Leu Cys Asp Ile Gly Gly Ile Ile Thr		
470	475	480
Pro Phe Ile Val Phe Arg Leu Arg Glu Val Trp Gln Ala Leu Pro		
485	490	495
Leu Ile Leu Phe Ala Val Leu Gly Leu Leu Ala Ala Gly Val Thr		
500	505	510
Leu Leu Leu Pro Glu Thr Lys Gly Val Ala Leu Pro Glu Thr Met		
515	520	525
Lys Asp Ala Glu Asn Leu Gly Arg Lys Ala Lys Pro Lys Glu Asn		
530	535	540
Thr Ile Tyr Leu Lys Val Gln Thr Ser Glu Pro Ser Gly Thr		
545	550	



<210> 83  
 <211> 527  
 <212> PRT  
 <213> Homo sapien

<400> 83  
 Met Arg Ser Asp Lys Ser Ala Leu Val Phe Leu Leu Leu Gln Leu  
 1 5 10 15  
 Phe Cys Val Gly Cys Gly Phe Cys Gly Lys Val Leu Val Trp Pro  
 20 25 30  
 Cys Asp Met Ser His Trp Leu Asn Val Lys Val Ile Leu Glu Glu  
 35 40 45  
 Leu Ile Val Arg Gly His Glu Val Thr Val Leu Thr His Ser Lys  
 50 55 60  
 Pro Ser Leu Ile Asp Tyr Arg Lys Pro Ser Ala Leu Lys Phe Glu  
 65 70 75  
 Val Val His Met Pro Gln Asp Arg Thr Glu Glu Asn Glu Ile Phe  
 80 85 90  
 Val Asp Leu Ala Leu Asn Val Leu Pro Gly Leu Ser Thr Trp Gln  
 95 100 105  
 Ser Val Ile Lys Leu Asn Asp Phe Phe Val Glu Ile Arg Gly Thr  
 110 115 120  
 Leu Lys Met Met Cys Glu Ser Phe Ile Tyr Asn Gln Thr Leu Met  
 125 130 135  
 Lys Lys Leu Gln Glu Thr Asn Tyr Asp Val Met Leu Ile Asp Pro  
 140 145 150  
 Val Ile Pro Cys Gly Asp Leu Met Ala Glu Leu Leu Ala Val Pro  
 155 160 165  
 Phe Val Leu Thr Leu Arg Ile Ser Val Gly Gly Asn Met Glu Arg  
 170 175 180  
 Ser Cys Gly Lys Leu Pro Ala Pro Leu Ser Tyr Val Pro Val Pro  
 185 190 195  
 Met Thr Gly Leu Thr Asp Arg Met Thr Phe Leu Glu Arg Val Lys  
 200 205 210  
 Asn Ser Met Leu Ser Val Leu Phe His Phe Trp Ile Gln Asp Tyr  
 215 220 225  
 Asp Tyr His Phe Trp Glu Glu Phe Tyr Ser Lys Ala Leu Gly Arg  
 230 235 240  
 Pro Thr Thr Leu Cys Glu Thr Val Gly Lys Ala Glu Ile Trp Leu  
 245 250 255  
 Ile Arg Thr Tyr Trp Asp Phe Glu Phe Pro Gln Pro Tyr Gln Pro

260	265	270
Asn Phe Glu Phe Val Gly Gly Leu His Cys Lys Pro Ala Lys Ala		
275	280	285
Leu Pro Lys Glu Met Glu Asn Phe Val Gln Ser Ser Gly Glu Asp		
290	295	300
Gly Ile Val Val Phe Ser Leu Gly Ser Leu Phe Gln Asn Val Thr		
305	310	315
Glu Glu Lys Ala Asn Ile Ile Ala Ser Ala Leu Ala Gln Ile Pro		
320	325	330
Gln Lys Val Leu Trp Arg Tyr Lys Gly Lys Lys Pro Ser Thr Leu		
335	340	345
Gly Ala Asn Thr Arg Leu Tyr Asp Trp Ile Pro Gln Asn Asp Leu		
350	355	360
Leu Gly His Pro Lys Thr Lys Ala Phe Ile Thr His Gly Gly Met		
365	370	375
Asn Gly Ile Tyr Glu Ala Ile Tyr His Gly Val Pro Met Val Gly		
380	385	390
Val Pro Ile Phe Gly Asp Gln Leu Asp Asn Ile Ala His Met Lys		
395	400	405
Ala Lys Gly Ala Ala Val Glu Ile Asn Phe Lys Thr Met Thr Ser		
410	415	420
Glu Asp Leu Leu Arg Ala Leu Arg Thr Val Ile Thr Asp Ser Ser		
425	430	435
Tyr Lys Glu Asn Ala Met Arg Leu Ser Arg Ile His His Asp Gln		
440	445	450
Pro Val Lys Pro Leu Asp Arg Ala Val Phe Trp Ile Glu Phe Val		
455	460	465
Met Arg His Lys Gly Ala Lys His Leu Arg Ser Ala Ala His Asp		
470	475	480
Leu Thr Trp Phe Gln His Tyr Ser Ile Asp Val Ile Gly Phe Leu		
485	490	495
Leu Thr Cys Val Ala Thr Ala Ile Phe Leu Phe Thr Lys Cys Phe		
500	505	510
Leu Phe Ser Cys Gln Lys Phe Asn Lys Thr Arg Lys Ile Glu Lys		
515	520	525

Arg Glu

<210> 84  
<211> 469

<212> PRT

<213> Homo sapien

<400> 84

Met	Gln	Ala	Asp	Ala	Arg	Ala	Phe	Phe	Ala	Gln	Asp	Gly	Val	Gln	
1.				5					10					15	
Ser	Leu	Leu	Thr	Gln	Lys	Trp	Trp	Gly	Asp	Met	Ala	Ser	Thr	Thr	
				20					25					30	
Pro	Ile	Trp	Ala	Leu	Val	Leu	Ala	Phe	Phe	Cys	Pro	Pro	Leu	Ile	
				35					40					45	
Tyr	Thr	Arg	Leu	Ile	Thr	Phe	Arg	Lys	Ser	Glu	Glu	Glu	Pro	Thr	
				50					55					60	
Arg	Glu	Glu	Leu	Glu	Phe	Asp	Met	Asp	Ser	Val	Ile	Asn	Gly	Glu	
				65					70					75	
Gly	Pro	Val	Gly	Thr	Ala	Asp	Pro	Ala	Glu	Lys	Thr	Pro	Leu	Gly	
				80					85					90	
Val	Pro	Arg	Gln	Ser	Gly	Arg	Pro	Gly	Cys	Cys	Gly	Gly	Arg	Cys	
				95					100					105	
Gly	Gly	Arg	Arg	Cys	Leu	Arg	Arg	Trp	Phe	His	Phe	Trp	Gly	Ala	
				110					115					120	
Pro	Val	Thr	Ile	Phe	Met	Gly	Asn	Val	Val	Ser	Tyr	Leu	Leu	Phe	
				125					130					135	
Leu	Leu	Leu	Phe	Ser	Arg	Val	Leu	Leu	Val	Asp	Phe	Gln	Pro	Ala	
				140					145					150	
Pro	Pro	Gly	Ser	Leu	Glu	Leu	Leu	Leu	Tyr	Phe	Trp	Ala	Phe	Thr	
				155					160					165	
Leu	Leu	Cys	Glu	Glu	Leu	Arg	Gln	Gly	Leu	Ser	Gly	Gly	Gly	Gly	
				170					175					180	
Ser	Leu	Ala	Ser	Gly	Gly	Pro	Gly	Pro	Gly	His	Ala	Ser	Leu	Ser	
				185					190					195	
Gln	Arg	Leu	Arg	Leu	Tyr	Leu	Ala	Asp	Ser	Trp	Asn	Gln	Cys	Asp	
				200					205					210	
Leu	Val	Ala	Leu	Thr	Cys	Phe	Leu	Leu	Gly	Val	Gly	Cys	Arg	Leu	
				215					220					225	
Thr	Pro	Gly	Leu	Tyr	His	Leu	Gly	Arg	Thr	Val	Leu	Cys	Ile	Asp	
				230					235					240	
Phe	Met	Val	Phe	Thr	Val	Arg	Leu	Leu	His	Ile	Phe	Thr	Val	Asn	
				245					250					255	
Lys	Gln	Leu	Gly	Pro	Lys	Ile	Val	Ile	Val	Ser	Lys	Met	Met	Lys	
				260					265					270	

Asp	Val	Phe	Phe	Phe	Leu	Phe	Phe	Leu	Gly	Val	Trp	Leu	Val	Ala	275	280	285
Tyr	Gly	Val	Ala	Thr	Glu	Gly	Leu	Leu	Arg	Pro	Arg	Asp	Ser	Asp	290	295	300
Phe	Pro	Ser	Ile	Leu	Arg	Arg	Val	Phe	Tyr	Arg	Pro	Tyr	Leu	Gln	305	310	315
Ile	Phe	Gly	Gln	Ile	Pro	Gln	Glu	Asp	Met	Asp	Val	Ala	Leu	Met	320	325	330
Glu	His	Ser	Asn	Cys	Ser	Ser	Glu	Pro	Gly	Phe	Trp	Ala	His	Pro	335	340	345
Pro	Gly	Ala	Gln	Ala	Gly	Thr	Cys	Val	Ser	Gln	Tyr	Ala	Asn	Trp	350	355	360
Leu	Val	Val	Leu	Leu	Leu	Val	Ile	Phe	Leu	Leu	Val	Ala	Asn	Ile	365	370	375
Leu	Leu	Val	Asn	Leu	Leu	Ile	Ala	Met	Phe	Ser	Tyr	Thr	Phe	Gly	380	385	390
Lys	Val	Gln	Gly	Asn	Ser	Asp	Leu	Tyr	Trp	Lys	Ala	Gln	Val	Thr	395	400	405
Ala	Ser	Ser	Gly	Asn	Ser	Thr	Leu	Gly	Pro	Arg	Trp	Pro	Arg	Pro	410	415	420
Leu	Ser	Ser	Ser	Pro	Thr	Cys	Ala	Ser	Cys	Ser	Gly	Asn	Cys	Ala	425	430	435
Gly	Asp	Pro	Gly	Ala	Pro	Ser	Arg	Pro	Pro	Arg	Pro	Ser	Ser	Ile	440	445	450
Ser	Gly	Phe	Thr	Phe	Leu	Arg	Lys	Pro	Ser	Gly	Ser	Ala	Asn	Val	455	460	465

Gly Ile Gly Ala

<210> 85

<211> 320

<212> PRT

<213> Homo sapien

<400> 85

Met	Thr	Leu	Trp	Asn	Gly	Val	Leu	Pro	Phe	Tyr	Pro	Gln	Pro	Arg	1	5	10	15
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	---	---	----	----

His	Ala	Ala	Gly	Phe	Ser	Val	Pro	Leu	Leu	Ile	Val	Ile	Leu	Val	20	25	30
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	----	----

Phe	Leu	Ala	Leu	Ala	Ala	Ser	Phe	Leu	Leu	Ile	Leu	Pro	Gly	Ile	35	40	45
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	----	----

Arg Gly His Ser Arg Trp Phe Trp Leu Val Arg Val Leu Leu Ser

50	55	60
Leu Phe Ile Gly Ala Glu Ile Val Ala Val His Phe Ser Ala Glu 65	70	75
Trp Phe Val Gly Thr Val Asn Thr Asn Thr Ser Tyr Lys Ala Phe 80	85	90
Ser Ala Ala Arg Val Thr Ala Arg Val Gly Leu Leu Val Gly Leu 95	100	105
Glu Gly Ile Asn Ile Thr Leu Thr Gly Thr Pro Val His Gln Leu 110	115	120
Asn Glu Thr Ile Asp Tyr Asn Glu Gln Phe Thr Trp Arg Leu Lys 125	130	135
Glu Asn Tyr Ala Ala Glu Tyr Ala Asn Ala Leu Glu Lys Gly Leu 140	145	150
Pro Asp Pro Val Leu Tyr Leu Ala Glu Lys Phe Thr Pro Ser Ser 155	160	165
Pro Cys Gly Leu Tyr His Gln Tyr His Leu Ala Gly His Tyr Ala 170	175	180
Ser Ala Thr Leu Trp Val Ala Phe Cys Phe Trp Leu Leu Ser Asn 185	190	195
Val Leu Leu Ser Thr Pro Ala Pro Leu Tyr Gly Gly Leu Ala Leu 200	205	210
Leu Thr Thr Gly Ala Phe Ala Leu Phe Gly Val Phe Ala Leu Ala 215	220	225
Ser Ile Ser Ser Val Pro Leu Cys Pro Leu Arg Leu Gly Ser Ser 230	235	240
Ala Leu Thr Thr Gln Tyr Gly Ala Ala Phe Trp Val Thr Leu Ala 245	250	255
Thr Gly Val Leu Cys Leu Phe Leu Gly Gly Ala Val Val Ser Leu 260	265	270
Gln Tyr Val Arg Pro Ser Ala Leu Arg Thr Leu Leu Asp Gln Ser 275	280	285
Ala Lys Asp Cys Ser Gln Glu Arg Gly Gly Ser Pro Leu Ile Leu 290	295	300
Gly Asp Pro Leu His Lys Gln Ala Ala Leu Pro Asp Leu Lys Cys 305	310	315
Ile Thr Thr Asn Leu 320		

<210> 86  
<211> 801

<212> PRT

<213> Homo sapien

<400> 86

Met	Glu	Arg	Leu	Trp	Gly	Leu	Phe	Gln	Arg	Ala	Gln	Gln	Leu	Ser	
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Pro	Arg	Ser	Ser	Gln	Thr	Val	Tyr	Gln	Arg	Val	Glu	Gly	Pro	Arg	
				20					25					30	
Lys	Gly	His	Leu	Glu	Glu	Glu	Glu	Glu	Asp	Gly	Glu	Glu	Gly	Ala	
				35					40					45	
Glu	Thr	Leu	Ala	His	Phe	Cys	Pro	Met	Glu	Leu	Arg	Gly	Pro	Glu	
				50					55					60	
Pro	Leu	Gly	Ser	Arg	Pro	Arg	Gln	Pro	Asn	Leu	Ile	Pro	Trp	Ala	
				65					70					75	
Ala	Ala	Gly	Arg	Arg	Ala	Ala	Pro	Tyr	Leu	Val	Leu	Thr	Ala	Leu	
				80					85					90	
Leu	Ile	Phe	Thr	Gly	Ala	Phe	Leu	Leu	Gly	Tyr	Val	Ala	Phe	Arg	
				95					100					105	
Gly	Ser	Cys	Gln	Ala	Cys	Gly	Asp	Ser	Val	Leu	Val	Val	Ser	Glu	
				110					115					120	
Asp	Val	Asn	Tyr	Glu	Pro	Asp	Leu	Asp	Phe	His	Gln	Gly	Arg	Leu	
				125					130					135	
Tyr	Trp	Ser	Asp	Leu	Gln	Ala	Met	Phe	Leu	Gln	Phe	Leu	Gly	Glu	
				140					145					150	
Gly	Arg	Leu	Glu	Asp	Thr	Ile	Arg	Gln	Thr	Ser	Leu	Arg	Glu	Arg	
				155					160					165	
Val	Ala	Gly	Ser	Ala	Gly	Met	Ala	Ala	Leu	Thr	Gln	Asp	Ile	Arg	
				170					175					180	
Ala	Ala	Leu	Ser	Arg	Gln	Lys	Leu	Asp	His	Val	Trp	Thr	Asp	Thr	
				185					190					195	
His	Tyr	Val	Gly	Leu	Gln	Phe	Pro	Asp	Pro	Ala	His	Pro	Asn	Thr	
				200					205					210	
Leu	His	Trp	Val	Asp	Glu	Ala	Gly	Lys	Val	Gly	Glu	Gln	Leu	Pro	
				215					220					225	
Leu	Glu	Asp	Pro	Asp	Val	Tyr	Cys	Pro	Tyr	Ser	Ala	Ile	Gly	Asn	
				230					235					240	
Val	Thr	Gly	Glu	Leu	Val	Tyr	Ala	His	Tyr	Gly	Arg	Pro	Glu	Asp	
				245					250					255	
Leu	Gln	Asp	Leu	Arg	Ala	Arg	Gly	Val	Asp	Pro	Val	Gly	Arg	Leu	
				260					265					270	

Leu Leu Val Arg	Val Gly Val Ile Ser	Phe Ala Gln Lys Val Thr
275	280	285
Asn Ala Gln Asp	Phe Gly Ala Gln Gly	Val Leu Ile Tyr Pro Glu
290	295	300
Pro Ala Asp Phe	Ser Gln Asp Pro Pro	Lys Pro Ser Leu Ser Ser
305	310	315
Gln Gln Ala Val	Tyr Gly His Val His	Leu Gly Thr Gly Asp Pro
320	325	330
Tyr Thr Pro Gly	Phe Pro Ser Phe Asn	Gln Thr Gln Phe Pro Pro
335	340	345
Val Ala Ser Ser	Gly Leu Pro Ser Ile	Pro Ala Gln Pro Ile Ser
350	355	360
Ala Asp Ile Ala	Ser Arg Leu Leu Arg	Lys Leu Lys Gly Pro Val
365	370	375
Ala Pro Gln Glu	Trp Gln Gly Ser Leu	Leu Gly Ser Pro Tyr His
380	385	390
Leu Gly Pro Gly	Pro Arg Leu Arg Leu	Val Val Asn Asn His Arg
395	400	405
Thr Ser Thr Pro	Ile Asn Asn Ile Phe	Gly Cys Ile Glu Gly Arg
410	415	420
Ser Glu Pro Asp	His Tyr Val Val Ile	Gly Ala Gln Arg Asp Ala
425	430	435
Trp Gly Pro Gly	Ala Ala Lys Ser Ala	Val Gly Thr Ala Ile Leu
440	445	450
Leu Glu Leu Val	Arg Thr Phe Ser Ser	Met Val Ser Asn Gly Phe
455	460	465
Arg Pro Arg Arg	Ser Leu Leu Phe Ile	Ser Trp Asp Gly Gly Asp
470	475	480
Phe Gly Ser Val	Gly Ser Thr Glu Trp	Leu Glu Gly Tyr Leu Ser
485	490	495
Val Leu His Leu	Lys Ala Val Val Tyr	Val Ser Leu Asp Asn Ala
500	505	510
Val Leu Gly Asp	Asp Lys Phe His Ala	Lys Thr Ser Pro Leu Leu
515	520	525
Thr Ser Leu Ile	Glu Ser Val Leu Lys	Gln Val Asp Ser Pro Asn
530	535	540
His Ser Gly Gln	Thr Leu Tyr Glu Gln	Val Val Phe Thr Asn Pro
545	550	555
Ser Trp Asp Ala	Glu Val Ile Arg Pro	Leu Pro Met Asp Ser Ser

560										565					570				
Ala	Tyr	Ser	Phe	Thr	Ala	Phe	Val	Gly	Val	Pro	Ala	Val	Glu	Phe					
				575					580					585					
Ser	Phe	Met	Glu	Asp	Asp	Gln	Ala	Tyr	Pro	Phe	Leu	His	Thr	Lys					
				590					595					600					
Glu	Asp	Thr	Tyr	Glu	Asn	Leu	His	Lys	Val	Leu	Gln	Gly	Arg	Leu					
				605					610					615					
Pro	Ala	Val	Ala	Gln	Ala	Val	Ala	Gln	Leu	Ala	Gly	Gln	Leu	Leu					
				620					625					630					
Ile	Arg	Leu	Ser	His	Asp	Arg	Leu	Leu	Pro	Leu	Asp	Phe	Gly	Arg					
				635					640					645					
Tyr	Gly	Asp	Val	Val	Leu	Arg	His	Ile	Gly	Asn	Leu	Asn	Glu	Phe					
				650					655					660					
Ser	Gly	Asp	Leu	Lys	Ala	Arg	Gly	Leu	Thr	Leu	Gln	Trp	Val	Tyr					
				665					670					675					
Ser	Ala	Arg	Gly	Asp	Tyr	Ile	Arg	Ala	Ala	Glu	Lys	Leu	Arg	Gln					
				680					685					690					
Glu	Ile	Tyr	Ser	Ser	Glu	Glu	Arg	Asp	Glu	Arg	Leu	Thr	Arg	Met					
				695					700					705					
Tyr	Asn	Val	Arg	Ile	Met	Arg	Val	Glu	Phe	Tyr	Phe	Leu	Ser	Gln					
				710					715					720					
Tyr	Val	Ser	Pro	Ala	Asp	Ser	Pro	Phe	Arg	His	Ile	Phe	Met	Gly					
				725					730					735					
Arg	Gly	Asp	His	Thr	Leu	Gly	Ala	Leu	Leu	Asp	His	Leu	Arg	Leu					
				740					745					750					
Leu	Arg	Ser	Asn	Ser	Ser	Gly	Thr	Pro	Gly	Ala	Thr	Ser	Ser	Thr					
				755					760					765					
Gly	Phe	Gln	Glu	Ser	Arg	Phe	Arg	Arg	Gln	Leu	Ala	Leu	Leu	Thr					
				770					775					780					
Trp	Thr	Leu	Gln	Gly	Ala	Ala	Asn	Ala	Leu	Ser	Gly	Asp	Val	Trp					
				785					790					795					
Asn	Ile	Asp	Asn	Asn	Phe														
				800															

<210> 87  
 <211> 318  
 <212> PRT  
 <213> Homo sapien

<400> 87  
 Met Val Glu Leu Met Phe Pro Leu Leu Leu Leu Leu Leu Pro Phe  
 1 5 10 15



Leu	Leu	Tyr	Met	Ala	Ala	Pro	Gln	Ile	Arg	Lys	Met	Leu	Ser	Ser			20	25	30
Gly	Val	Cys	Thr	Ser	Thr	Val	Gln	Leu	Pro	Gly	Lys	Val	Val	Val			35	40	45
Val	Thr	Gly	Ala	Asn	Thr	Gly	Ile	Gly	Lys	Glu	Thr	Ala	Lys	Glu			50	55	60
Leu	Ala	Gln	Arg	Gly	Ala	Arg	Val	Tyr	Leu	Ala	Cys	Arg	Asp	Val			65	70	75
Glu	Lys	Gly	Glu	Leu	Val	Ala	Lys	Glu	Ile	Gln	Thr	Thr	Thr	Gly			80	85	90
Asn	Gln	Gln	Val	Leu	Val	Arg	Lys	Leu	Asp	Leu	Ser	Asp	Thr	Lys			95	100	105
Ser	Ile	Arg	Ala	Phe	Ala	Lys	Gly	Phe	Leu	Ala	Glu	Glu	Lys	His			110	115	120
Leu	His	Val	Leu	Ile	Asn	Asn	Ala	Gly	Val	Met	Met	Cys	Pro	Tyr			125	130	135
Ser	Lys	Thr	Ala	Asp	Gly	Phe	Glu	Met	His	Ile	Gly	Val	Asn	His			140	145	150
Leu	Gly	His	Phe	Leu	Leu	Thr	His	Leu	Leu	Leu	Glu	Lys	Leu	Lys			155	160	165
Glu	Ser	Ala	Pro	Ser	Arg	Ile	Val	Asn	Val	Ser	Ser	Leu	Ala	His			170	175	180
His	Leu	Gly	Arg	Ile	His	Phe	His	Asn	Leu	Gln	Gly	Glu	Lys	Phe			185	190	195
Tyr	Asn	Ala	Gly	Leu	Ala	Tyr	Cys	His	Ser	Lys	Leu	Ala	Asn	Ile			200	205	210
Leu	Phe	Thr	Gln	Glu	Leu	Ala	Arg	Arg	Leu	Lys	Gly	Ser	Gly	Val			215	220	225
Thr	Thr	Tyr	Ser	Val	His	Pro	Gly	Thr	Val	Gln	Ser	Glu	Leu	Val			230	235	240
Arg	His	Ser	Ser	Phe	Met	Arg	Trp	Met	Trp	Trp	Leu	Phe	Ser	Phe			245	250	255
Phe	Ile	Lys	Thr	Pro	Gln	Gln	Gly	Ala	Gln	Thr	Ser	Leu	His	Cys			260	265	270
Ala	Leu	Thr	Glu	Gly	Leu	Glu	Ile	Leu	Ser	Gly	Asn	His	Phe	Ser			275	280	285
Asp	Cys	His	Val	Ala	Trp	Val	Ser	Ala	Gln	Ala	Arg	Asn	Glu	Thr			290	295	300
Ile	Ala	Arg	Arg	Leu	Trp	Asp	Val	Ser	Cys	Asp	Leu	Leu	Gly	Leu					

305

310

315

Pro Ile Asp

<210> 88  
 <211> 131  
 <212> PRT  
 <213> Homo sapien

<400> 88  
 Met Lys Ile Phe Leu Pro Val Leu Leu Ala Ala Leu Leu Gly Val  
     1                    5                    10                    15  
 Glu Arg Ala Ser Ser Leu Met Cys Phe Ser Cys Leu Asn Gln Lys  
                     20                    25                    30  
 Ser Asn Leu Tyr Cys Leu Lys Pro Thr Ile Cys Ser Asp Gln Asp  
                     35                    40                    45  
 Asn Tyr Cys Val Thr Val Ser Ala Ser Ala Gly Ile Gly Asn Leu  
                     50                    55                    60  
 Val Thr Phe Gly His Ser Leu Ser Lys Thr Cys Ser Pro Ala Cys  
                     65                    70                    75  
 Pro Ile Pro Glu Gly Val Asn Val Gly Val Ala Ser Met Gly Ile  
                     80                    85                    90  
 Ser Cys Cys Gln Ser Phe Leu Cys Asn Phe Ser Ala Ala Asp Gly  
                     95                    100                    105  
 Gly Leu Arg Ala Ser Val Thr Leu Leu Gly Ala Gly Leu Leu Leu  
                     110                    115                    120  
 Ser Leu Leu Pro Ala Leu Leu Arg Phe Gly Pro  
                     125                    130

<210> 89  
 <211> 343  
 <212> PRT  
 <213> Homo sapien

<220>  
 <221> Unsure  
 <222> 233, 328, 333  
 <223> Unknown amino acid

<400> 89  
 Met Leu Leu Leu Lys Lys His Thr Glu Asp Ile Ser Ser Val Tyr  
     1                    5                    10                    15  
 Glu Ile Arg Glu Arg Leu Gly Ser Gly Ala Phe Ser Glu Val Val  
                     20                    25                    30  
 Leu Ala Gln Glu Arg Gly Ser Ala His Leu Val Ala Leu Lys Cys  
                     35                    40                    45

Ile	Pro	Lys	Lys	Ala	Leu	Arg	Gly	Lys	Glu	Ala	Leu	Val	Glu	Asn	
				50					55					60	
Glu	Ile	Ala	Val	Leu	Arg	Arg	Ile	Ser	His	Pro	Asn	Ile	Val	Ala	
				65					70					75	
Leu	Glu	Asp	Val	His	Glu	Ser	Pro	Ser	His	Leu	Tyr	Leu	Ala	Met	
				80					85					90	
Glu	Leu	Val	Thr	Gly	Gly	Glu	Leu	Phe	Asp	Arg	Ile	Met	Glu	Arg	
				95					100					105	
Gly	Ser	Tyr	Thr	Glu	Lys	Asp	Ala	Ser	His	Leu	Val	Gly	Gln	Val	
				110					115					120	
Leu	Gly	Ala	Val	Ser	Tyr	Leu	His	Ser	Leu	Gly	Ile	Val	His	Arg	
				125					130					135	
Asp	Leu	Lys	Pro	Glu	Asn	Leu	Leu	Tyr	Ala	Thr	Pro	Phe	Glu	Asp	
				140					145					150	
Ser	Lys	Ile	Met	Val	Ser	Asp	Phe	Gly	Leu	Ser	Lys	Ile	Gln	Ala	
				155					160					165	
Gly	Asn	Met	Leu	Gly	Thr	Ala	Cys	Gly	Thr	Pro	Gly	Tyr	Val	Ala	
				170					175					180	
Pro	Glu	Leu	Leu	Glu	Gln	Lys	Pro	Tyr	Gly	Lys	Ala	Val	Asp	Val	
				185					190					195	
Trp	Ala	Leu	Gly	Val	Ile	Ser	Tyr	Ile	Leu	Leu	Cys	Gly	Tyr	Pro	
				200					205					210	
Pro	Phe	Tyr	Asp	Glu	Ser	Asp	Pro	Glu	Leu	Phe	Ser	Gln	Ile	Leu	
				215					220					225	
Arg	Ala	Ser	Tyr	Glu	Phe	Asp	Xaa	Pro	Phe	Trp	Asp	Asp	Ile	Ser	
				230					235					240	
Glu	Ser	Gly	Lys	Asp	Phe	Ile	Arg	His	Leu	Leu	Glu	Arg	Asp	Leu	
				245					250					255	
Gln	Lys	Arg	Phe	Thr	Cys	Gln	Gln	Ala	Leu	Arg	Asp	Leu	Trp	Ile	
				260					265					270	
Phe	Trp	Asp	Thr	Gly	Phe	Gly	Arg	Asp	Ile	Leu	Gly	Phe	Val	Ser	
				275					280					285	
Glu	Gln	Ile	Arg	Lys	Asn	Phe	Ala	Trp	Thr	His	Trp	Lys	Arg	Ala	
				290					295					300	
Phe	Asn	Ala	Thr	Leu	Phe	Leu	Arg	His	Ile	Arg	Lys	Leu	Gly	Gln	
				305					310					315	
Ile	Pro	Glu	Gly	Glu	Gly	Ala	Ser	Glu	Gln	Gly	Met	Xaa	Arg	His	
				320					325					330	
Ser	His	Xaa	Gly	Leu	Arg	Ala	Gly	Gln	Pro	Pro	Lys	Trp			

335

340

<210> 90  
 <211> 911  
 <212> PRT  
 <213> Homo sapien

<400> 90

Met	Glu	Glu	Leu	Gln	Asp	Asp	Tyr	Glu	Asp	Met	Met	Glu	Glu	Asn	1	5	10	15
Leu	Glu	Gln	Glu	Glu	Tyr	Glu	Asp	Pro	Asp	Ile	Pro	Glu	Ser	Gln	20	25	30	
Met	Glu	Glu	Pro	Ala	Ala	His	Asp	Thr	Glu	Ala	Thr	Ala	Thr	Asp	35	40	45	
Tyr	His	Thr	Thr	Ser	His	Pro	Gly	Thr	His	Glu	Val	Tyr	Val	Glu	50	55	60	
Leu	Gln	Glu	Leu	Val	Met	Asp	Glu	Lys	Asn	Gln	Glu	Leu	Arg	Trp	65	70	75	
Met	Glu	Ala	Ala	Arg	Trp	Val	Gln	Leu	Glu	Glu	Asn	Leu	Gly	Glu	80	85	90	
Asn	Gly	Ala	Trp	Gly	Arg	Pro	His	Leu	Ser	His	Leu	Thr	Phe	Trp	95	100	105	
Ser	Leu	Leu	Glu	Leu	Arg	Arg	Val	Phe	Thr	Lys	Gly	Thr	Val	Leu	110	115	120	
Leu	Asp	Leu	Gln	Glu	Thr	Ser	Leu	Ala	Gly	Val	Ala	Asn	Gln	Leu	125	130	135	
Leu	Asp	Arg	Phe	Ile	Phe	Glu	Asp	Gln	Ile	Arg	Pro	Gln	Asp	Arg	140	145	150	
Glu	Glu	Leu	Leu	Arg	Ala	Leu	Leu	Leu	Lys	His	Ser	His	Ala	Gly	155	160	165	
Glu	Leu	Glu	Ala	Leu	Gly	Gly	Val	Lys	Pro	Ala	Val	Leu	Thr	Arg	170	175	180	
Ser	Gly	Asp	Pro	Ser	Gln	Pro	Leu	Leu	Pro	Gln	His	Ser	Ser	Leu	185	190	195	
Glu	Thr	Gln	Leu	Phe	Cys	Glu	Gln	Gly	Asp	Gly	Gly	Thr	Glu	Gly	200	205	210	
His	Ser	Pro	Ser	Gly	Ile	Leu	Glu	Lys	Ile	Pro	Pro	Asp	Ser	Glu	215	220	225	
Ala	Thr	Leu	Val	Leu	Val	Gly	Arg	Ala	Asp	Phe	Leu	Glu	Gln	Pro	230	235	240	
Val	Leu	Gly	Phe	Val	Arg	Leu	Gln	Glu	Ala	Ala	Glu	Leu	Glu	Ala	245	250	255	

Val Glu Leu Pro	Val Pro Ile Arg Phe	Leu Phe Val Leu Leu Gly	260	265	270
Pro Glu Ala Pro	His Ile Asp Tyr Thr	Gln Leu Gly Arg Ala Ala	275	280	285
Ala Thr Leu Met	Ser Glu Arg Val Phe	Arg Ile Asp Ala Tyr Met	290	295	300
Ala Gln Ser Arg	Gly Glu Leu Leu His	Ser Leu Glu Gly Phe Leu	305	310	315
Asp Cys Ser Leu	Val Leu Pro Pro Thr	Asp Ala Pro Ser Glu Gln	320	325	330
Ala Leu Leu Ser	Leu Val Pro Val Gln	Arg Glu Leu Leu Arg Arg	335	340	345
Arg Tyr Gln Ser	Ser Pro Ala Lys Pro	Asp Ser Ser Phe Tyr Lys	350	355	360
Gly Leu Asp Leu	Asn Gly Gly Pro Asp	Asp Pro Leu Gln Gln Thr	365	370	375
Gly Gln Leu Phe	Gly Gly Leu Val Arg	Asp Ile Arg Arg Arg Tyr	380	385	390
Pro Tyr Tyr Leu	Ser Asp Ile Thr Asp	Ala Phe Ser Pro Gln Val	395	400	405
Leu Ala Ala Val	Ile Phe Ile Tyr Phe	Ala Ala Leu Ser Pro Ala	410	415	420
Ile Thr Phe Gly	Gly Leu Leu Gly Glu	Lys Thr Arg Asn Gln Met	425	430	435
Gly Val Ser Glu	Leu Leu Ile Ser Thr	Ala Val Gln Gly Ile Leu	440	445	450
Phe Ala Leu Leu	Gly Ala Gln Pro Leu	Leu Val Val Gly Phe Ser	455	460	465
Gly Pro Leu Leu	Val Phe Glu Glu Ala	Phe Phe Ser Phe Cys Glu	470	475	480
Thr Asn Gly Leu	Glu Tyr Ile Val Gly	Arg Val Trp Ile Gly Phe	485	490	495
Trp Leu Ile Leu	Leu Val Val Leu Val	Val Ala Phe Glu Gly Ser	500	505	510
Phe Leu Val Arg	Phe Ile Ser Arg Tyr	Thr Gln Glu Ile Phe Ser	515	520	525
Phe Leu Ile Ser	Leu Ile Phe Ile Tyr	Glu Thr Phe Ser Lys Leu	530	535	540
Ile Lys Ile Phe	Gln Asp His Pro Leu	Gln Lys Thr Tyr Asn Tyr			

Asn Val Leu Met	Val Pro Lys Pro Gln Gly	Pro Leu Pro Asn Thr	545	550	555
	560	565			570
Ala Leu Leu Ser	Leu Val Leu Met Ala Gly Thr Phe Phe Phe Ala		575	580	585
Met Met Leu Arg	Lys Phe Lys Asn Ser Ser Tyr Phe Pro Gly Lys		590	595	600
Leu Arg Arg Val	Ile Gly Asp Phe Gly Val Pro Ile Ser Ile Leu		605	610	615
Ile Met Val Leu	Val Asp Phe Phe Ile Gln Asp Thr Tyr Thr Gln		620	625	630
Lys Leu Ser Val	Pro Asp Gly Phe Lys Val Ser Asn Ser Ser Ala		635	640	645
Arg Gly Trp Val	Ile His Pro Leu Gly Leu Arg Ser Glu Phe Pro		650	655	660
Ile Trp Met Met	Phe Ala Ser Ala Leu Pro Ala Leu Leu Val Phe		665	670	675
Ile Leu Ile Phe	Leu Glu Ser Gln Ile Thr Thr Leu Ile Val Ser		680	685	690
Lys Pro Glu Arg	Lys Met Val Lys Gly Ser Gly Phe His Leu Asp		695	700	705
Leu Leu Leu Val	Val Gly Met Gly Gly Val Ala Ala Leu Phe Gly		710	715	720
Met Pro Trp Leu	Ser Ala Thr Thr Val Arg Ser Val Thr His Ala		725	730	735
Asn Ala Leu Thr	Val Met Gly Lys Ala Ser Thr Pro Gly Ala Ala		740	745	750
Ala Gln Ile Gln	Glu Val Lys Glu Gln Arg Ile Ser Gly Leu Leu		755	760	765
Val Ala Val Leu	Val Gly Leu Ser Ile Leu Met Glu Pro Ile Leu		770	775	780
Ser Arg Ile Pro	Leu Ala Val Leu Phe Gly Ile Phe Leu Tyr Met		785	790	795
Gly Val Thr Ser	Leu Ser Gly Ile Gln Leu Phe Asp Arg Ile Leu		800	805	810
Leu Leu Phe Lys	Pro Pro Lys Tyr His Pro Asp Val Pro Tyr Val		815	820	825
Lys Arg Val Lys	Thr Trp Arg Met His Leu Phe Thr Gly Ile Gln		830	835	840

Ile	Ile	Cys	Leu	Ala	Val	Leu	Trp	Val	Val	Lys	Ser	Thr	Pro	Ala	
				845					850					855	
Ser	Leu	Ala	Leu	Pro	Phe	Val	Leu	Ile	Leu	Thr	Val	Pro	Leu	Arg	
				860					865					870	
Arg	Val	Leu	Leu	Pro	Leu	Ile	Phe	Arg	Asn	Val	Glu	Leu	Gln	Cys	
				875					880					885	
Leu	Asp	Ala	Asp	Asp	Ala	Lys	Ala	Thr	Phe	Asp	Glu	Glu	Glu	Gly	
				890					895					900	
Arg	Asp	Glu	Tyr	Asp	Glu	Val	Ala	Met	Pro	Val					
				905					910						

<210> 91  
 <211> 387  
 <212> PRT  
 <213> Homo sapien

<400> 91															
Met	Val	Ala	Trp	Val	Val	Ser	Thr	Gly	Val	Ala	Ile	Ala	Cys	Cys	
1				5					10					15	
Ala	Ala	Val	Tyr	Tyr	Leu	Ala	Glu	Tyr	Asn	Leu	Glu	Phe	Leu	Lys	
				20					25					30	
Thr	His	Ser	Asn	Pro	Gly	Ala	Val	Leu	Leu	Leu	Pro	Phe	Val	Val	
				35					40					45	
Ser	Cys	Ile	Asn	Leu	Ala	Val	Pro	Cys	Ile	Tyr	Ser	Met	Phe	Arg	
				50					55					60	
Leu	Val	Glu	Arg	Tyr	Glu	Met	Pro	Arg	His	Glu	Val	Tyr	Val	Leu	
				65					70					75	
Leu	Ile	Arg	Asn	Ile	Phe	Leu	Lys	Ile	Ser	Ile	Ile	Gly	Ile	Leu	
				80					85					90	
Cys	Tyr	Tyr	Trp	Leu	Asn	Thr	Val	Ala	Leu	Ser	Gly	Glu	Glu	Cys	
				95					100					105	
Trp	Glu	Thr	Leu	Ile	Gly	Gln	Asp	Ile	Tyr	Arg	Leu	Leu	Leu	Met	
				110					115					120	
Asp	Phe	Val	Phe	Ser	Leu	Val	Asn	Ser	Phe	Leu	Gly	Glu	Phe	Leu	
				125					130					135	
Arg	Arg	Ile	Ile	Gly	Met	Gln	Leu	Ile	Thr	Ser	Leu	Gly	Leu	Gln	
				140					145					150	
Glu	Phe	Asp	Ile	Ala	Arg	Asn	Val	Leu	Glu	Leu	Ile	Tyr	Ala	Gln	
				155					160					165	
Thr	Leu	Val	Trp	Ile	Gly	Ile	Phe	Phe	Cys	Pro	Leu	Leu	Pro	Phe	
				170					175					180	
Ile	Gln	Met	Ile	Met	Leu	Phe	Ile	Met	Phe	Tyr	Ser	Lys	Asn	Ile	

	185		190		195
Ser Leu Met Met	Asn Phe Gln Pro Pro	Ser Lys Ala Trp Arg	Ala		
	200		205		210
Ser Gln Met Met	Thr Phe Phe Ile Phe	Leu Leu Phe Phe Pro	Ser		
	215		220		225
Phe Thr Gly Val	Leu Cys Thr Leu Ala	Ile Thr Ile Trp Arg	Leu		
	230		235		240
Lys Pro Ser Ala	Asp Cys Gly Pro Phe	Arg Gly Leu Pro Leu	Phe		
	245		250		255
Ile His Ser Ile	Tyr Ser Trp Ile Asp	Thr Leu Ser Thr Arg	Pro		
	260		265		270
Gly Tyr Leu Trp	Val Val Trp Ile Tyr	Arg Asn Leu Ile Gly	Ser		
	275		280		285
Val His Phe Phe	Phe Ile Leu Thr Leu	Ile Val Leu Ile Ile	Thr		
	290		295		300
Tyr Leu Tyr Trp	Gln Ile Thr Glu Gly	Arg Lys Ile Met Ile	Arg		
	305		310		315
Leu Leu His Glu	Gln Ile Ile Asn Glu	Gly Lys Asp Lys Met	Phe		
	320		325		330
Leu Ile Glu Lys	Leu Ile Lys Leu Gln	Asp Met Glu Lys Lys	Ala		
	335		340		345
Asn Pro Ser Ser	Leu Val Leu Glu Arg	Arg Glu Val Glu Gln	Gln		
	350		355		360
Gly Phe Leu His	Leu Gly Glu His Asp	Gly Ser Leu Asp Leu	Arg		
	365		370		375
Ser Arg Arg Ser	Val Gln Glu Gly Asn	Pro Arg Ala			
	380		385		

<210> 92  
 <211> 509  
 <212> PRT  
 <213> Homo sapien

<400> 92  
 Met Glu Arg Arg Arg Leu Trp Gly Ser Ile Gln Ser Arg Tyr Ile  
 1, 5 10 15  
 Ser Met Ser Val Trp Thr Ser Pro Arg Arg Leu Val Glu Leu Ala  
 20 25 30  
 Gly Gln Ser Leu Leu Lys Asp Glu Ala Leu Ala Ile Ala Ala Leu  
 35 40 45  
 Glu Leu Leu Pro Arg Glu Leu Phe Pro Pro Leu Phe Met Ala Ala  
 50 55 60



Phe	Asp	Gly	Arg	His	Ser	Gln	Thr	Leu	Lys	Ala	Met	Val	Gln	Ala		65	70	75
Trp	Pro	Phe	Thr	Cys	Leu	Pro	Leu	Gly	Val	Leu	Met	Lys	Gly	Gln		80	85	90
His	Leu	His	Leu	Glu	Thr	Phe	Lys	Ala	Val	Leu	Asp	Gly	Leu	Asp		95	100	105
Val	Leu	Leu	Ala	Gln	Glu	Val	Arg	Pro	Arg	Arg	Trp	Lys	Leu	Gln		110	115	120
Val	Leu	Asp	Leu	Arg	Lys	Asn	Ser	His	Gln	Asp	Phe	Trp	Thr	Val		125	130	135
Trp	Ser	Gly	Asn	Arg	Ala	Ser	Leu	Tyr	Ser	Phe	Pro	Glu	Pro	Glu		140	145	150
Ala	Ala	Gln	Pro	Met	Thr	Lys	Lys	Arg	Lys	Val	Asp	Gly	Leu	Ser		155	160	165
Thr	Glu	Ala	Glu	Gln	Pro	Phe	Ile	Pro	Val	Glu	Val	Leu	Val	Asp		170	175	180
Leu	Phe	Leu	Lys	Glu	Gly	Ala	Cys	Asp	Glu	Leu	Phe	Ser	Tyr	Leu		185	190	195
Ile	Glu	Lys	Val	Lys	Arg	Lys	Lys	Asn	Val	Leu	Arg	Leu	Cys	Cys		200	205	210
Lys	Lys	Leu	Lys	Ile	Phe	Ala	Met	Pro	Met	Gln	Asp	Ile	Lys	Met		215	220	225
Ile	Leu	Lys	Met	Val	Gln	Leu	Asp	Ser	Ile	Glu	Asp	Leu	Glu	Val		230	235	240
Thr	Cys	Thr	Trp	Lys	Leu	Pro	Thr	Leu	Ala	Lys	Phe	Ser	Pro	Tyr		245	250	255
Leu	Gly	Gln	Met	Ile	Asn	Leu	Arg	Arg	Leu	Leu	Leu	Ser	His	Ile		260	265	270
His	Ala	Ser	Ser	Tyr	Ile	Ser	Pro	Glu	Lys	Glu	Glu	Gln	Tyr	Ile		275	280	285
Ala	Gln	Phe	Thr	Ser	Gln	Phe	Leu	Ser	Leu	Gln	Cys	Leu	Gln	Ala		290	295	300
Leu	Tyr	Val	Asp	Ser	Leu	Phe	Phe	Leu	Arg	Gly	Arg	Leu	Asp	Gln		305	310	315
Leu	Leu	Arg	His	Val	Met	Asn	Pro	Leu	Glu	Thr	Leu	Ser	Ile	Thr		320	325	330
Asn	Cys	Arg	Leu	Ser	Glu	Gly	Asp	Val	Met	His	Leu	Ser	Gln	Ser		335	340	345
Pro	Ser	Val	Ser	Gln	Leu	Ser	Val	Leu	Ser	Leu	Ser	Gly	Val	Met				

	350		355		360
Leu Thr Asp Val	Ser Pro Glu Pro Leu	Gln Ala Leu Leu Glu	Arg		
	365		370		375
Ala Ser Ala Thr	Leu Gln Asp Leu Val	Phe Asp Glu Cys Gly	Ile		
	380		385		390
Thr Asp Asp Gln	Leu Leu Ala Leu Leu	Pro Ser Leu Ser His	Cys		
	395		400		405
Ser Gln Leu Thr	Thr Leu Ser Phe Tyr	Gly Asn Ser Ile Ser	Ile		
	410		415		420
Ser Ala Leu/Gln	Ser Leu Leu Gln His	Leu Ile Gly Leu Ser	Asn		
	425		430		435
Leu Thr His Val	Leu Tyr Pro Val Pro	Leu Glu Ser Tyr Glu	Asp		
	440		445		450
Ile His Gly Thr	Leu His Leu Glu Arg	Leu Ala Tyr Leu His	Ala		
	455		460		465
Arg Leu Arg Glu	Leu Leu Cys Glu Leu	Gly Arg Pro Ser Met	Val		
	470		475		480
Trp Leu Ser Ala	Asn Pro Cys Pro His	Cys Gly Asp Arg Thr	Phe		
	485		490		495
Tyr Asp Pro Glu	Pro Ile Leu Cys Pro	Cys Phe Met Pro Asn			
	500		505		

<210> 93  
 <211> 943  
 <212> PRT  
 <213> Homo sapien

<400> 93	
Met Thr Gln Arg Ser Ile Ala Gly Pro Ile Cys Asn Leu Lys Phe	
1	15
Val Thr Leu Leu Val Ala Leu Ser Ser Glu Leu Pro Phe Leu Gly	
20	30
Ala Gly Val Gln Leu Gln Asp Asn Gly Tyr Asn Gly Leu Leu Ile	
35	45
Ala Ile Asn Pro Gln Val Pro Glu Asn Gln Asn Leu Ile Ser Asn	
50	60
Ile Lys Glu Met Ile Thr Glu Ala Ser Phe Tyr Leu Phe Asn Ala	
65	75
Thr Lys Arg Arg Val Phe Phe Arg Asn Ile Lys Ile Leu Ile Pro	
80	90
Ala Thr Trp Lys Ala Asn Asn Asn Ser Lys Ile Lys Gln Glu Ser	
95	105

Tyr	Glu	Lys	Ala	Asn	Val	Ile	Val	Thr	Asp	Trp	Tyr	Gly	Ala	His	110	115	120
Gly	Asp	Asp	Pro	Tyr	Thr	Leu	Gln	Tyr	Arg	Gly	Cys	Gly	Lys	Glu	125	130	135
Gly	Lys	Tyr	Ile	His	Phe	Thr	Pro	Asn	Phe	Leu	Leu	Asn	Asp	Asn	140	145	150
Leu	Thr	Ala	Gly	Tyr	Gly	Ser	Arg	Gly	Arg	Val	Phe	Val	His	Glu	155	160	165
Trp	Ala	His	Leu	Arg	Trp	Gly	Val	Phe	Asp	Glu	Tyr	Ile	Asn	Asp	170	175	180
Lys	Pro	Phe	Tyr	Ile	Asn	Gly	Gln	Asn	Gln	Ile	Lys	Val	Thr	Arg	185	190	195
Cys	Ser	Ser	Asp	Ile	Thr	Gly	Ile	Phe	Val	Cys	Glu	Lys	Gly	Pro	200	205	210
Cys	Pro	Gln	Glu	Asn	Cys	Ile	Ile	Ser	Lys	Leu	Phe	Lys	Glu	Gly	215	220	225
Cys	Thr	Phe	Ile	Tyr	Asn	Ser	Thr	Gln	Asn	Ala	Thr	Ala	Ser	Ile	230	235	240
Met	Phe	Met	Gln	Ser	Leu	Ser	Ser	Val	Val	Glu	Phe	Cys	Asn	Ala	245	250	255
Ser	Thr	His	Asn	Gln	Glu	Ala	Pro	Asn	Leu	Gln	Asn	Gln	Met	Cys	260	265	270
Ser	Leu	Arg	Ser	Ala	Trp	Asp	Val	Ile	Thr	Asp	Ser	Ala	Asp	Phe	275	280	285
His	His	Ser	Phe	Pro	Met	Asn	Gly	Thr	Glu	Leu	Pro	Pro	Pro	Pro	290	295	300
Thr	Phe	Ser	Leu	Val	Gln	Ala	Gly	Asp	Lys	Val	Val	Cys	Leu	Val	305	310	315
Leu	Asp	Val	Ser	Ser	Lys	Met	Ala	Glu	Ala	Asp	Arg	Leu	Leu	Gln	320	325	330
Leu	Gln	Gln	Ala	Ala	Glu	Phe	Tyr	Leu	Met	Gln	Ile	Val	Glu	Ile	335	340	345
His	Thr	Phe	Val	Gly	Ile	Ala	Ser	Phe	Asp	Ser	Lys	Gly	Glu	Ile	350	355	360
Arg	Ala	Gln	Leu	His	Gln	Ile	Asn	Ser	Asn	Asp	Asp	Arg	Lys	Leu	365	370	375
Leu	Val	Ser	Tyr	Leu	Pro	Thr	Thr	Val	Ser	Ala	Lys	Thr	Asp	Ile	380	385	390
Ser	Ile	Cys	Ser	Gly	Leu	Lys	Lys	Gly	Phe	Glu	Val	Val	Glu	Lys			

395	400	405
Leu Asn Gly Lys Ala Tyr Gly Ser Val Met Ile Leu Val Thr Ser		
410	415	420
Gly Asp Asp Lys Leu Leu Gly Asn Cys Leu Pro Thr Val Leu Ser		
425	430	435
Ser Gly Ser Thr Ile His Ser Ile Ala Leu Gly Ser Ser Ala Ala		
440	445	450
Pro Asn Leu Glu Glu Leu Ser Arg Leu Thr Gly Gly Leu Lys Phe		
455	460	465
Phe Val Pro Asp Ile Ser Asn Ser Asn Ser Met Ile Asp Ala Phe		
470	475	480
Ser Arg Ile Ser Ser Gly Thr Gly Asp Ile Phe Gln Gln His Ile		
485	490	495
Gln Leu Glu Ser Thr Gly Glu Asn Val Lys Pro His His Gln Leu		
500	505	510
Lys Asn Thr Val Thr Val Asp Asn Thr Val Gly Asn Asp Thr Met		
515	520	525
Phe Leu Val Thr Trp Gln Ala Ser Gly Pro Pro Glu Ile Ile Leu		
530	535	540
Phe Asp Pro Asp Gly Arg Lys Tyr Tyr Thr Asn Asn Phe Ile Thr		
545	550	555
Asn Leu Thr Phe Arg Thr Ala Ser Leu Trp Ile Pro Gly Thr Ala		
560	565	570
Lys Pro Gly His Trp Thr Tyr Thr Leu Asn Asn Thr His His Ser		
575	580	585
Leu Gln Ala Leu Lys Val Thr Val Thr Ser Arg Ala Ser Asn Ser		
590	595	600
Ala Val Pro Pro Ala Thr Val Glu Ala Phe Val Glu Arg Asp Ser		
605	610	615
Leu His Phe Pro His Pro Val Met Ile Tyr Ala Asn Val Lys Gln		
620	625	630
Gly Phe Tyr Pro Ile Leu Asn Ala Thr Val Thr Ala Thr Val Glu		
635	640	645
Pro Glu Thr Gly Asp Pro Val Thr Leu Arg Leu Leu Asp Asp Gly		
650	655	660
Ala Gly Ala Asp Val Ile Lys Asn Asp Gly Ile Tyr Ser Arg Tyr		
665	670	675
Phe Phe Ser Phe Ala Ala Asn Gly Arg Tyr Ser Leu Lys Val His		
680	685	690

Val Asn His Ser	Pro Ser Ile Ser Thr	Pro Ala His Ser Ile	Pro
695		700	705
Gly Ser His Ala	Met Tyr Val Pro Gly	Tyr Thr Ala Asn Gly	Asn
710		715	720
Ile Gln Met Asn	Ala Pro Arg Lys Ser	Val Gly Arg Asn Glu	Glu
725		730	735
Glu Arg Lys Trp	Gly Phe Ser Arg Val	Ser Ser Gly Gly Ser	Phe
740		745	750
Ser Val Leu Gly	Val Pro Ala Gly Pro	His Pro Asp Val Phe	Pro
755		760	765
Pro Cys Lys Ile	Ile Asp Leu Glu Ala	Val Lys Val Glu Glu	Glu
770		775	780
Leu Thr Leu Ser	Trp Thr Ala Pro Gly	Glu Asp Phe Asp Gln	Gly
785		790	795
Gln Ala Thr Ser	Tyr Glu Ile Arg Met	Ser Lys Ser Leu Gln	Asn
800		805	810
Ile Gln Asp Asp	Phe Asn Asn Ala Ile	Leu Val Asn Thr Ser	Lys
815		820	825
Arg Asn Pro Gln	Gln Ala Gly Ile Arg	Glu Ile Phe Thr Phe	Ser
830		835	840
Pro Gln Ile Ser	Thr Asn Gly Pro Glu	His Gln Pro Asn Gly	Glu
845		850	855
Thr His Glu Ser	His Arg Ile Tyr Val	Ala Ile Arg Ala Met	Asp
860		865	870
Arg Asn Ser Leu	Gln Ser Ala Val Ser	Asn Ile Ala Gln Ala	Pro
875		880	885
Leu Phe Ile Pro	Pro Asn Ser Asp Pro	Val Pro Ala Arg Asp	Tyr
890		895	900
Leu Ile Leu Lys	Gly Val Leu Thr Ala	Met Gly Leu Ile Gly	Ile
905		910	915
Ile Cys Leu Ile	Ile Val Val Thr His	His Thr Leu Ser Arg	Lys
920		925	930
Lys Arg Ala Asp	Lys Lys Glu Asn Gly	Thr Lys Leu Leu	
935		940	

<210> 94  
 <211> 492  
 <212> PRT  
 <213> Homo sapien

<400> 94  
 Met Ala Leu Asn Ser Gly Ser Pro Pro Ala Ile Gly Pro Tyr Tyr

1	5	10	15
Glu Asn His Gly Tyr Gln Pro Glu Asn Pro Tyr Pro Ala Gln Pro	20	25	30
Thr Val Val Pro Thr Val Tyr Glu Val His Pro Ala Gln Tyr Tyr	35	40	45
Pro Ser Pro Val Pro Gln Tyr Ala Pro Arg Val Leu Thr Gln Ala	50	55	60
Ser Asn Pro Val Val Cys Thr Gln Pro Lys Ser Pro Ser Gly Thr	65	70	75
Val Cys Thr Ser Lys Thr Lys Lys Ala Leu Cys Ile Thr Leu Thr	80	85	90
Leu Gly Thr Phe Leu Val Gly Ala Ala Leu Ala Ala Gly Leu Leu	95	100	105
Trp Lys Phe Met Gly Ser Lys Cys Ser Asn Ser Gly Ile Glu Cys	110	115	120
Asp Ser Ser Gly Thr Cys Ile Asn Pro Ser Asn Trp Cys Asp Gly	125	130	135
Val Ser His Cys Pro Gly Gly Glu Asp Glu Asn Arg Cys Val Arg	140	145	150
Leu Tyr Gly Pro Asn Phe Ile Leu Gln Met Tyr Ser Ser Gln Arg	155	160	165
Lys Ser Trp His Pro Val Cys Gln Asp Asp Trp Asn Glu Asn Tyr	170	175	180
Gly Arg Ala Ala Cys Arg Asp Met Gly Tyr Lys Asn Asn Phe Tyr	185	190	195
Ser Ser Gln Gly Ile Val Asp Asp Ser Gly Ser Thr Ser Phe Met	200	205	210
Lys Leu Asn Thr Ser Ala Gly Asn Val Asp Ile Tyr Lys Lys Leu	215	220	225
Tyr His Ser Asp Ala Cys Ser Ser Lys Ala Val Val Ser Leu Arg	230	235	240
Cys Leu Ala Cys Gly Val Asn Leu Asn Ser Ser Arg Gln Ser Arg	245	250	255
Ile Val Gly Gly Glu Ser Ala Leu Pro Gly Ala Trp Pro Trp Gln	260	265	270
Val Ser Leu His Val Gln Asn Val His Val Cys Gly Gly Ser Ile	275	280	285
Ile Thr Pro Glu Trp Ile Val Thr Ala Ala His Cys Val Glu Lys	290	295	300

Pro Leu Asn Asn Pro Trp His Trp Thr Ala Phe Ala Gly Ile Leu  
 305 310 315  
 Arg Gln Ser Phe Met Phe Tyr Gly Ala Gly Tyr Gln Val Gln Lys  
 320 325 330  
 Val Ile Ser His Pro Asn Tyr Asp Ser Lys Thr Lys Asn Asn Asp  
 335 340 345  
 Ile Ala Leu Met Lys Leu Gln Lys Pro Leu Thr Phe Asn Asp Leu  
 350 355 360  
 Val Lys Pro Val Cys Leu Pro Asn Pro Gly Met Met Leu Gln Pro  
 365 370 375  
 Glu Gln Leu Cys Trp Ile Ser Gly Trp Gly Ala Thr Glu Glu Lys  
 380 385 390  
 Gly Lys Thr Ser Glu Val Leu Asn Ala Ala Lys Val Leu Leu Ile  
 395 400 405  
 Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr Asp Asn Leu Ile  
 410 415 420  
 Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly Asn Val Asp  
 425 430 435  
 Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser Asn Asn  
 440 445 450  
 Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly Cys  
 455 460 465  
 Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe  
 470 475 480  
 Thr Asp Trp Ile Tyr Arg Gln Met Lys Ala Asn Gly  
 485 490

<210> 95  
 <211> 253  
 <212> PRT  
 <213> Homo sapien

<400> 95  
 Met Ala Arg Ser Leu Leu Leu Pro Leu Gln Ile Leu Leu Leu Ser  
 1 5 10 15  
 Leu Ala Leu Glu Thr Ala Gly Glu Glu Ala Gln Gly Asp Lys Ile  
 20 25 30  
 Ile Asp Gly Ala Pro Cys Ala Arg Gly Ser His Pro Trp Gln Val  
 35 40 45  
 Ala Leu Leu Ser Gly Asn Gln Leu His Cys Gly Gly Val Leu Val  
 50 55 60  
 Asn Glu Arg Trp Val Leu Thr Ala Ala His Cys Lys Met Asn Glu

	65		70		75
Tyr Thr Val His Leu Gly Ser Asp Thr Leu Gly Asp Arg Arg Ala	80		85		90
Gln Arg Ile Lys Ala Ser Lys Ser Phe Arg His Pro Gly Tyr Ser	95		100		105
Thr Gln Thr His Val Asn Asp Leu Met Leu Val Lys Leu Asn Ser	110		115		120
Gln Ala Arg Leu Ser Ser Met Val Lys Lys Val Arg Leu Pro Ser	125		130		135
Arg Cys Glu Pro Pro Gly Thr Thr Cys Thr Val Ser Gly Trp Gly	140		145		150
Thr Thr Thr Ser Pro Asp Val Thr Phe Pro Ser Asp Leu Met Cys	155		160		165
Val Asp Val Lys Leu Ile Ser Pro Gln Asp Cys Thr Lys Val Tyr	170		175		180
Lys Asp Leu Leu Glu Asn Ser Met Leu Cys Ala Gly Ile Pro Asp	185		190		195
Ser Lys Lys Asn Ala Cys Asn Gly Asp Ser Gly Gly Pro Leu Val	200		205		210
Cys Arg Gly Thr Leu Gln Gly Leu Val Ser Trp Gly Thr Phe Pro	215		220		225
Cys Gly Gln Pro Asn Asp Pro Gly Val Tyr Thr Gln Val Cys Lys	230		235		240
Phe Thr Lys Trp Ile Asn Asp Thr Met Lys Lys His Arg	245		250		

<210> 96  
 <211> 339  
 <212> PRT  
 <213> Homo sapien

<400> 96
Met Glu Ser Arg Lys Asp Ile Thr Asn Gln Glu Glu Leu Trp Lys
1 5 10 15
Met Lys Pro Arg Arg Asn Leu Glu Glu Asp Asp Tyr Leu His Lys
20 25 30
Asp Thr Gly Glu Thr Ser Met Leu Lys Arg Pro Val Leu Leu His
35 40 45
Leu His Gln Thr Ala His Ala Asp Glu Phe Asp Cys Pro Ser Glu
50 55 60
Leu Gln His Thr Gln Glu Leu Phe Pro Gln Trp His Leu Pro Ile
65 70 75



Lys	Ile	Ala	Ala	Ile	Ile	Ala	Ser	Leu	Thr	Phe	Leu	Tyr	Thr	Leu		80	85	90
Leu	Arg	Glu	Val	Ile	His	Pro	Leu	Ala	Thr	Ser	His	Gln	Gln	Tyr		95	100	105
Phe	Tyr	Lys	Ile	Pro	Ile	Leu	Val	Ile	Asn	Lys	Val	Leu	Pro	Met		110	115	120
Val	Ser	Ile	Thr	Leu	Leu	Ala	Leu	Val	Tyr	Leu	Pro	Gly	Val	Ile		125	130	135
Ala	Ala	Ile	Val	Gln	Leu	His	Asn	Gly	Thr	Lys	Tyr	Lys	Lys	Phe		140	145	150
Pro	His	Trp	Leu	Asp	Lys	Trp	Met	Leu	Thr	Arg	Lys	Gln	Phe	Gly		155	160	165
Leu	Leu	Ser	Phe	Phe	Phe	Ala	Val	Leu	His	Ala	Ile	Tyr	Ser	Leu		170	175	180
Ser	Tyr	Pro	Met	Arg	Arg	Ser	Tyr	Arg	Tyr	Lys	Leu	Leu	Asn	Trp		185	190	195
Ala	Tyr	Gln	Gln	Val	Gln	Gln	Asn	Lys	Glu	Asp	Ala	Trp	Ile	Glu		200	205	210
His	Asp	Val	Trp	Arg	Met	Glu	Ile	Tyr	Val	Ser	Leu	Gly	Ile	Val		215	220	225
Gly	Leu	Ala	Ile	Leu	Ala	Leu	Leu	Ala	Val	Thr	Ser	Ile	Pro	Ser		230	235	240
Val	Ser	Asp	Ser	Leu	Thr	Trp	Arg	Glu	Phe	His	Tyr	Ile	Gln	Ser		245	250	255
Lys	Leu	Gly	Ile	Val	Ser	Leu	Leu	Leu	Gly	Thr	Ile	His	Ala	Leu		260	265	270
Ile	Phe	Ala	Trp	Asn	Lys	Trp	Ile	Asp	Ile	Lys	Gln	Phe	Val	Trp		275	280	285
Tyr	Thr	Pro	Pro	Thr	Phe	Met	Ile	Ala	Val	Phe	Leu	Pro	Ile	Val		290	295	300
Val	Leu	Ile	Phe	Lys	Ser	Ile	Leu	Phe	Leu	Pro	Cys	Leu	Arg	Lys		305	310	315
Lys	Ile	Leu	Lys	Ile	Arg	His	Gly	Trp	Glu	Asp	Val	Thr	Lys	Ile		320	325	330
Asn	Lys	Thr	Glu	Ile	Cys	Ser	Gln	Leu								335		

<210> 97  
 <211> 420  
 <212> PRT  
 <213> Homo sapien

<400> 97

Met	Asp	Ser	Ser	Pro	Ser	Leu	Pro	Leu	Ile	Arg	Thr	Pro	Glu	Ser	1	5	10	15
Ser	Leu	His	Glu	Ala	Leu	Asp	Gln	Cys	Met	Thr	Ala	Leu	Asp	Leu	20	25	30	
Phe	Leu	Thr	Asn	Gln	Phe	Ser	Glu	Ala	Leu	Ser	Tyr	Leu	Lys	Pro	35	40	45	
Arg	Thr	Lys	Glu	Ser	Met	Tyr	His	Ser	Leu	Thr	Tyr	Ala	Thr	Ile	50	55	60	
Leu	Glu	Met	Gln	Ala	Met	Met	Thr	Phe	Asp	Pro	Gln	Asp	Ile	Leu	65	70	75	
Leu	Ala	Gly	Asn	Met	Met	Lys	Glu	Ala	Gln	Met	Leu	Cys	Gln	Arg	80	85	90	
His	Arg	Arg	Lys	Ser	Ser	Val	Thr	Asp	Ser	Phe	Ser	Ser	Leu	Val	95	100	105	
Asn	Arg	Pro	Thr	Leu	Gly	Gln	Phe	Thr	Glu	Glu	Glu	Ile	His	Ala	110	115	120	
Glu	Val	Cys	Tyr	Ala	Glu	Cys	Leu	Leu	Gln	Arg	Ala	Ala	Leu	Thr	125	130	135	
Phe	Leu	Gln	Gly	Ser	Ser	His	Gly	Gly	Ala	Val	Arg	Pro	Arg	Ala	140	145	150	
Leu	His	Asp	Pro	Ser	His	Ala	Cys	Ser	Cys	Pro	Pro	Gly	Pro	Gly	155	160	165	
Arg	Gln	His	Leu	Phe	Leu	Leu	Gln	Asp	Glu	Asn	Met	Val	Ser	Phe	170	175	180	
Ile	Lys	Gly	Gly	Ile	Lys	Val	Arg	Asn	Ser	Tyr	Gln	Thr	Tyr	Lys	185	190	195	
Glu	Leu	Asp	Ser	Leu	Val	Gln	Ser	Ser	Gln	Tyr	Cys	Lys	Gly	Glu	200	205	210	
Asn	His	Pro	His	Phe	Glu	Gly	Gly	Val	Lys	Leu	Gly	Val	Gly	Ala	215	220	225	
Phe	Asn	Leu	Thr	Leu	Ser	Met	Leu	Pro	Thr	Arg	Ile	Leu	Arg	Leu	230	235	240	
Leu	Glu	Phe	Val	Gly	Phe	Ser	Gly	Asn	Lys	Asp	Tyr	Gly	Leu	Leu	245	250	255	
Gln	Leu	Glu	Glu	Gly	Ala	Ser	Gly	His	Ser	Phe	Arg	Ser	Val	Leu	260	265	270	
Cys	Val	Met	Leu	Leu	Leu	Cys	Tyr	His	Thr	Phe	Leu	Thr	Phe	Val	275	280	285	

Leu Gly Thr Gly Asn Val Asn Ile Glu Glu Ala Glu Lys Leu Leu	290	295	300
Lys Pro Tyr Leu Asn Arg Tyr Pro Lys Gly Ala Ile Phe Leu Phe	305	310	315
Phe Ala Gly Arg Ile Glu Val Ile Lys Gly Asn Ile Asp Ala Val	320	325	330
Ser Asp Gly Gly Pro Gly Arg Gly Trp Gly Ser Leu Gly Val Ser	335	340	345
Gln Thr Ser Arg Lys Ser Gly Thr Cys Asp Ile Leu Arg Asp Arg	350	355	360
Ile Asp Trp Gly Arg Gly Gly Gly Gln Glu Arg Thr Asn Gln Arg	365	370	375
Ala Gly Ala Gly Glu Ala Leu Leu Ala Glu Gln Pro Gly Lys Thr	380	385	390
Arg Glu Glu Glu Ala Phe Val Val Pro Gly Ile Leu Thr Gly Arg	395	400	405
Tyr Arg Thr Ala Ala Leu Gln Trp Arg Glu Val Glu Gly Gly Ala	410	415	420

<210> 98  
 <211> 514  
 <212> PRT  
 <213> Homo sapien

<400> 98																		
Met	Ala	Asp	Ala	Glu	Val	Ile	Ile	Leu	Pro	Lys	Lys	His	Lys	Lys	1	5	10	15
Lys	Lys	Glu	Arg	Lys	Ser	Leu	Pro	Glu	Glu	Asp	Val	Ala	Glu	Ile	20	25	30	
Gln	His	Ala	Glu	Glu	Phe	Leu	Ile	Lys	Pro	Glu	Ser	Lys	Val	Ala	35	40	45	
Lys	Leu	Asp	Thr	Ser	Gln	Trp	Pro	Leu	Leu	Leu	Lys	Asn	Phe	Asp	50	55	60	
Lys	Leu	Asn	Val	Arg	Thr	Thr	His	Tyr	Thr	Pro	Leu	Ala	Cys	Gly	65	70	75	
Ser	Asn	Pro	Leu	Lys	Arg	Glu	Ile	Gly	Asp	Tyr	Ile	Arg	Thr	Gly	80	85	90	
Phe	Ile	Asn	Leu	Asp	Lys	Pro	Ser	Asn	Pro	Ser	Ser	His	Glu	Val	95	100	105	
Val	Ala	Trp	Ile	Arg	Arg	Ile	Leu	Arg	Val	Glu	Lys	Thr	Gly	His	110	115	120	
Ser Gly Thr Leu Asp Pro Lys Val Thr Gly Cys Leu Ile Val Cys																		

125	130	135
Ile Glu Arg Ala Thr Arg Leu Val Lys	Ser Gln Gln Ser Ala Gly	
140	145	150
Lys Glu Tyr Val Gly Ile Val Arg Leu	His Asn Ala Ile Glu Gly	
155	160	165
Gly Thr Gln Leu Ser Arg Ala Leu Glu	Thr Leu Thr Gly Ala Leu	
170	175	180
Phe Gln Arg Pro Pro Leu Ile Ala Ala	Val Lys Arg Gln Leu Arg	
185	190	195
Val Arg Thr Ile Tyr Glu Ser Lys Met	Ile Glu Tyr Asp Pro Glu	
200	205	210
Arg Arg Leu Gly Ile Phe Trp Val Ser	Cys Glu Ala Gly Thr Tyr	
215	220	225
Ile Arg Thr Leu Cys Val His Leu Gly	Leu Leu Leu Gly Val Gly	
230	235	240
Gly Gln Met Gln Glu Leu Arg Arg Val	Arg Ser Gly Val Met Ser	
245	250	255
Glu Lys Asp His Met Val Thr Met His	Asp Val Leu Asp Ala Gln	
260	265	270
Trp Leu Tyr Asp Asn His Lys Asp Glu	Ser Tyr Leu Arg Arg Val	
275	280	285
Val Tyr Pro Leu Glu Lys Leu Leu Thr	Ser His Lys Arg Leu Val	
290	295	300
Met Lys Asp Ser Ala Val Asn Ala Ile	Cys Tyr Gly Ala Lys Ile	
305	310	315
Met Leu Pro Gly Val Leu Arg Tyr Glu	Asp Gly Ile Glu Val Asn	
320	325	330
Gln Glu Ile Val Val Ile Thr Thr Lys	Gly Glu Ala Ile Cys Met	
335	340	345
Ala Ile Ala Leu Met Thr Thr Ala Val	Ile Ser Thr Cys Asp His	
350	355	360
Gly Ile Val Ala Lys Ile Lys Arg Val	Ile Met Glu Arg Asp Thr	
365	370	375
Tyr Pro Arg Lys Trp Gly Leu Gly Pro	Lys Ala Ser Gln Lys Lys	
380	385	390
Leu Met Ile Lys Gln Gly Leu Leu Asp	Lys His Gly Lys Pro Thr	
395	400	405
Asp Ser Thr Pro Ala Thr Trp Lys Gln	Glu Tyr Val Asp Tyr Ser	
410	415	420

Glu Ser Ala Lys Lys Glu Val Val Ala Glu Val Val Lys Ala Pro  
 425 430 435  
 Gln Val Val Ala Glu Ala Ala Lys Thr Ala Lys Arg Lys Arg Glu  
 440 445 450  
 Ser Glu Ser Glu Ser Asp Glu Thr Pro Pro Ala Ala Pro Gln Leu  
 455 460 465  
 Ile Lys Lys Glu Lys Lys Lys Ser Lys Lys Asp Lys Lys Ala Lys  
 470 475 480  
 Ala Gly Leu Glu Ser Gly Ala Glu Pro Gly Asp Gly Asp Ser Asp  
 485 490 495  
 Thr Thr Lys Lys Lys Lys Lys Lys Lys Lys Ala Lys Glu Val Glu  
 500 505 510  
 Leu Val Ser Glu

<210> 99  
 <211> 313  
 <212> PRT  
 <213> Homo sapien

<400> 99  
 Met Ala Leu Arg Ile Cys Val Thr Tyr Thr Pro Ala Leu Pro Ile  
 1 5 10 15  
 Gly Leu Cys Thr Arg Cys Cys Leu Cys Leu Glu Gln Ser Pro Ser  
 20 25 30  
 Trp Cys His Cys Leu Arg Gly Val Ser Phe Leu Thr Phe His Leu  
 35 40 45  
 His Gln Ser Val Pro Leu Gly Asp Arg Asp Ser Leu Leu Met Phe  
 50 55 60  
 Thr Arg Gln Ala Gly His Phe Val Glu Gly Ser Lys Ala Gly Arg  
 65 70 75  
 Ser Arg Gly Arg Leu Cys Leu Ser Gln Ala Leu Arg Val Ala Val  
 80 85 90  
 Arg Gly Ala Phe Val Ser Leu Trp Phe Ala Ala Gly Ala Gly Asp  
 95 100 105  
 Arg Glu Arg Asn Lys Gly Asp Lys Gly Ala Gln Thr Gly Ala Gly  
 110 115 120  
 Leu Ser Gln Glu Ala Glu Asp Val Asp Val Ser Arg Ala Arg Arg  
 125 130 135  
 Val Thr Asp Ala Pro Gln Gly Thr Leu Cys Gly Thr Gly Asn Arg  
 140 145 150  
 Asn Ser Gly Ser Gln Ser Ala Arg Ala Val Gly Val Ala His Leu

155	160	165
Gly Glu Ala Phe Arg Val Gly Val Glu Gln Ala Ile Ser Ser Cys		
170	175	180
Pro Glu Glu Val His Gly Arg His Gly Leu Ser Met Glu Ile Met		
185	190	195
Trp Ala Arg Met Asp Val Ala Leu Arg Ser Pro Gly Arg Gly Leu		
200	205	210
Leu Ala Gly Ala Gly Ala Leu Cys Val Thr Leu Ala Glu Ser Ser		
215	220	225
Cys Pro Asp Tyr Glu Arg Gly Arg Arg Ala Cys Leu Thr Leu His		
230	235	240
Arg His Pro Thr Pro His Cys Ser Thr Trp Gly Leu Pro Leu Arg		
245	250	255
Val Ala Gly Ser Trp Leu Thr Val Val Thr Val Glu Ala Leu Gly		
260	265	270
Gly Trp Arg Met Gly Val Arg Arg Thr Gly Gln Val Gly Pro Thr		
275	280	285
Met His Pro Pro Pro Val Ser Gly Ala Ser Pro Leu Leu Leu His		
290	295	300
His Leu Leu Leu Leu Leu Leu Ile Ile Ile Leu Thr Cys		
305	310	

<210> 100  
 <211> 132  
 <212> PRT  
 <213> Homo sapien

<400> 100

Met Gly Ile Val Ala Asn Phe Gln Glu Leu Ala Val Pro Val Val		
1	5	10
His Asp Gly Gly Ala Leu Leu Ala Phe Val Cys Gly Val Val Tyr		
20	25	30
Thr Leu Leu Gln Ser Ile Ile Ser Tyr Lys Ser Cys Pro Gln Trp		
35	40	45
Asn Ser Leu Ser Thr Cys His Ile Arg Met Val Ile Ser Ala Val		
50	55	60
Ser Cys Ala Ala Val Ile Pro Met Ile Val Cys Ala Ser Leu Ile		
65	70	75
Ser Ile Thr Lys Leu Glu Trp Asn Pro Arg Glu Lys Asp Tyr Val		
80	85	90
Tyr His Val Val Ser Ala Ile Cys Glu Trp Thr Val Ala Phe Gly		
95	100	105

Phe Ile Phe Tyr Phe Leu Thr Phe Ile Gln Asp Phe Gln Ser Val  
110 115 120

Thr Leu Arg Ile Ser Thr Glu Ile Asn Gly Asp Ile  
125 130

<210> 101

<211> 416

<212> PRT

<213> Homo sapien

<400> 101

Met Pro Arg Gln Leu Ser Ala Ala Ala Ala Leu Phe Ala Ser Leu  
1 5 10 15

Ala Val Ile Leu His Asp Gly Ser Gln Met Arg Ala Lys Ala Phe  
20 25 30

Pro Glu Thr Arg Asp Tyr Ser Gln Pro Thr Ala Ala Ala Thr Val  
35 40 45

Gln Asp Ile Lys Lys Pro Val Gln Gln Pro Ala Lys Gln Ala Pro  
50 55 60

His Gln Thr Leu Ala Ala Arg Phe Met Asp Gly His Ile Thr Phe  
65 70 75

Gln Thr Ala Ala Thr Val Lys Ile Pro Thr Thr Thr Pro Ala Thr  
80 85 90

Thr Lys Asn Thr Ala Thr Thr Ser Pro Ile Thr Tyr Thr Leu Val  
95 100 105

Thr Thr Gln Ala Thr Pro Asn Asn Ser His Thr Ala Pro Pro Val  
110 115 120

Thr Glu Val Thr Val Gly Pro Ser Leu Ala Pro Tyr Ser Leu Pro  
125 130 135

Pro Thr Ile Thr Pro Pro Ala His Thr Ala Gly Thr Ser Ser Ser  
140 145 150

Thr Val Ser His Thr Thr Gly Asn Thr Thr Gln Pro Ser Asn Gln  
155 160 165

Thr Thr Leu Pro Ala Thr Leu Ser Ile Ala Leu His Lys Ser Thr  
170 175 180

Thr Gly Gln Lys Pro Asp Gln Pro Thr His Ala Pro Gly Thr Thr  
185 190 195

Ala Ala Ala His Asn Thr Thr Arg Thr Ala Ala Pro Ala Ser Thr  
200 205 210

Val Pro Gly Pro Thr Leu Ala Pro Gln Pro Ser Ser Val Lys Thr  
215 220 225

Gly Ile Tyr Gln Val Leu Asn Gly Ser Arg Leu Cys Ile Lys Ala

230	235	240
Glu Met Gly Ile Gln Leu Ile Val Gln Asp Lys Glu Ser Val Phe		
245	250	255
Ser Pro Arg Arg Tyr Phe Asn Ile Asp Pro Asn Ala Thr Gln Ala		
260	265	270
Ser Gly Asn Cys Gly Thr Arg Lys Ser Asn Leu Leu Leu Asn Phe		
275	280	285
Gln Gly Gly Phe Val Asn Leu Thr Phe Thr Lys Asp Glu Glu Ser		
290	295	300
Tyr Tyr Ile Ser Glu Val Gly Ala Tyr Leu Thr Val Ser Asp Pro		
305	310	315
Glu Thr Val Tyr Gln Gly Ile Lys His Ala Val Val Met Phe Gln		
320	325	330
Thr Ala Val Gly His Ser Phe Lys Cys Val Ser Glu Gln Ser Leu		
335	340	345
Gln Leu Ser Ala His Leu Gln Val Lys Thr Thr Asp Val Gln Leu		
350	355	360
Gln Ala Phe Asp Phe Glu Asp Asp His Phe Gly Asn Val Asp Glu		
365	370	375
Cys Ser Ser Asp Tyr Thr Ile Val Leu Pro Val Ile Gly Ala Ile		
380	385	390
Val Val Gly Leu Cys Leu Met Gly Met Gly Val Tyr Lys Ile Arg		
395	400	405
Leu Arg Cys Gln Ser Ser Gly Tyr Gln Arg Ile		
410	415	

<210> 102  
 <211> 134  
 <212> PRT  
 <213> Homo sapien

<400> 102  
 Met Thr Glu Glu Pro Ile Lys Glu Ile Leu Gly Ala Pro Lys Ala  
 1 5 10 15  
 His Met Ala Ala Thr Met Glu Lys Ser Pro Lys Ser Glu Val Val  
 20 25 30  
 Ile Thr Thr Val Pro Leu Val Ser Glu Ile Gln Leu Met Ala Ala  
 35 40 45  
 Thr Gly Gly Thr Glu Leu Ser Cys Tyr Arg Cys Ile Ile Pro Phe  
 50 55 60  
 Ala Val Val Val Phe Ile Ala Gly Ile Val Val Thr Ala Val Ala  
 65 70 75



Tyr Ser Phe Asn Ser His Gly Ser Ile Ile Ser Ile Phe Gly Leu  
                             80                            85                            90  
 Val Val Leu Ser Ser Gly Leu Phe Leu Leu Ala Ser Ser Ala Leu  
                             95                            100                            105  
 Cys Trp Lys Val Arg Gln Arg Ser Lys Lys Ala Lys Arg Arg Glu  
                             110                            115                            120  
 Ser Gln Thr Ala Leu Val Ala Asn Gln Arg Ser Leu Phe Ala  
                             125                            130

<210> 103  
 <211> 318  
 <212> PRT  
 <213> Homo sapien

<400> 103  
 Met Leu Ser Leu Leu His Ala Ser Thr Leu Ala Val Leu Gly Ala  
   1                            5                            10                            15  
 Leu Cys Val Tyr Gly Ala Gly His Leu Glu Gln Pro Gln Ile Ser  
                             20                            25                            30  
 Ser Thr Lys Thr Leu Ser Lys Thr Ala Arg Leu Glu Cys Val Val  
                             35                            40                            45  
 Ser Gly Ile Thr Ile Ser Ala Thr Ser Val Tyr Trp Tyr Arg Glu  
                             50                            55                            60  
 Arg Pro Gly Glu Val Ile Gln Phe Leu Val Ser Ile Ser Tyr Asp  
                             65                            70                            75  
 Gly Thr Val Arg Lys Glu Ser Gly Ile Pro Ser Gly Lys Phe Glu  
                             80                            85                            90  
 Val Asp Arg Ile Pro Glu Thr Ser Thr Ser Thr Leu Thr Ile His  
                             95                            100                            105  
 Asn Val Glu Lys Gln Asp Ile Ala Thr Tyr Tyr Cys Ala Leu Trp  
                             110                            115                            120  
 Glu Val Arg Leu Ala Asn Gln Glu Leu Gly Lys Lys Ile Lys Val  
                             125                            130                            135  
 Phe Gly Pro Gly Thr Lys Leu Ile Ile Thr Asp Lys Gln Leu Asp  
                             140                            145                            150  
 Ala Asp Val Ser Pro Lys Pro Thr Ile Phe Leu Pro Ser Ile Ala  
                             155                            160                            165  
 Glu Thr Lys Leu Gln Lys Ala Gly Thr Tyr Leu Cys Leu Leu Glu  
                             170                            175                            180  
 Lys Phe Phe Pro Asp Val Ile Lys Ile His Trp Gln Glu Lys Lys  
                             185                            190                            195  
 Ser Asn Thr Ile Leu Gly Ser Gln Glu Gly Asn Thr Met Lys Thr

	200		205		210
Asn Asp Thr Tyr	Met Lys Phe Ser Trp	Leu Thr Val Pro Glu Lys			
	215		220		225
Ser Leu Asp Lys	Glu His Arg Cys Ile	Val Arg His Glu Asn Asn			
	230		235		240
Lys Asn Gly Val	Asp Gln Glu Ile Ile	Phe Pro Pro Ile Lys Thr			
	245		250		255
Asp Val Ile Thr	Met Asp Pro Lys Asp	Asn Cys Ser Lys Asp Ala			
	260		265		270
Asn Asp Thr Leu	Leu Leu Gln Leu Thr	Asn Thr Ser Ala Tyr Tyr			
	275		280		285
Thr Tyr Leu Leu	Leu Leu Leu Lys Ser	Val Val Tyr Phe Ala Ile			
	290		295		300
Ile Thr Cys Cys	Leu Leu Arg Arg Thr	Ala Phe Cys Cys Asn Gly			
	305		310		315

Glu Lys Ser

<210> 104  
 <211> 440  
 <212> PRT  
 <213> Homo sapien

<400> 104

Met Asn Tyr Ser	Leu His Leu Ala Phe	Val Cys Leu Ser Leu Phe
1	5	10 15
Thr Glu Arg Met	Cys Ile Gln Gly Ser	Gln Phe Asn Val Glu Val
	20	25 30
Gly Arg Ser Asp	Lys Leu Ser Leu Pro	Gly Phe Glu Asn Leu Thr
	35	40 45
Ala Gly Tyr Asn	Lys Phe Leu Arg Pro	Asn Phe Gly Gly Glu Pro
	50	55 60
Val Gln Ile Ala	Leu Thr Leu Asp Ile	Ala Ser Ile Ser Ser Ile
	65	70 75
Ser Glu Ser Asn	Met Asp Tyr Thr Ala	Thr Ile Tyr Leu Arg Gln
	80	85 90
Arg Trp Met Asp	Gln Arg Leu Val Phe	Glu Gly Asn Lys Ser Phe
	95	100 105
Thr Leu Asp Ala	Arg Leu Val Glu Phe	Leu Trp Val Pro Asp Thr
	110	115 120
Tyr Ile Val Glu	Ser Lys Lys Ser Phe	Leu His Glu Val Thr Val
	125	130 135

Gly Asn Arg Leu	Ile Arg Leu Phe Ser	Asn Gly Thr Val Leu Tyr	140	145	150
Ala Leu Arg Ile	Thr Thr Thr Val Ala Cys	Asn Met Asp Leu Ser	155	160	165
Lys Tyr Pro Met	Asp Thr Gln Thr Cys	Lys Leu Gln Leu Glu Ser	170	175	180
Trp Gly Tyr Asp	Gly Asn Asp Val Glu Phe	Thr Trp Leu Arg Gly	185	190	195
Asn Asp Ser Val	Arg Gly Leu Glu His	Leu Arg Leu Ala Gln Tyr	200	205	210
Thr Ile Glu Arg	Tyr Phe Thr Leu Val	Thr Arg Ser Gln Gln Glu	215	220	225
Thr Gly Asn Tyr	Thr Arg Leu Val Leu	Gln Phe Glu Leu Arg Arg	230	235	240
Asn Val Leu Tyr	Phe Ile Leu Glu Thr	Tyr Val Pro Ser Thr Phe	245	250	255
Leu Val Val Leu	Ser Trp Val Ser Phe	Trp Ile Ser Leu Asp Ser	260	265	270
Val Pro Ala Arg	Thr Cys Ile Gly Val	Thr Thr Val Leu Ser Met	275	280	285
Thr Thr Leu Met	Ile Gly Ser Arg Thr	Ser Leu Pro Asn Thr Asn	290	295	300
Cys Phe Ile Lys	Ala Ile Asp Val Tyr	Leu Gly Ile Cys Phe Ser	305	310	315
Phe Val Phe Gly	Ala Leu Leu Glu Tyr	Ala Val Ala His Tyr Ser	320	325	330
Ser Leu Gln Gln	Met Ala Ala Lys Asp	Arg Gly Thr Thr Lys Glu	335	340	345
Val Glu Glu Val	Ser Ile Thr Asn Ile	Ile Asn Ser Ser Ile Ser	350	355	360
Ser Phe Lys Arg	Lys Ile Ser Phe Ala	Ser Ile Glu Ile Ser Ser	365	370	375
Asp Asn Val Asp	Tyr Ser Asp Leu Thr	Met Lys Thr Ser Asp Lys	380	385	390
Phe Lys Phe Val	Phe Arg Glu Lys Met	Gly Arg Ile Val Asp Tyr	395	400	405
Phe Thr Ile Gln	Asn Pro Ser Asn Val	Asp His Tyr Ser Lys Leu	410	415	420
Leu Phe Pro Leu	Ile Phe Met Leu Ala	Asn Val Phe Tyr Trp Ala			

	425		430		435
Tyr Tyr Met Tyr Phe					
440					
<210> 105					
<211> 508					
<212> PRT					
<213> Homo sapien					
<400> 105					
Met Ile Leu Val Leu Leu Cys Ala Phe Leu Ile Pro Cys Pro Pro					
1	5		10		15
Arg Asp Leu His Ser Thr Trp Ser Arg His Leu Gly Ser Gln Gly					
	20		25		30
Gly Gly Asp Leu Ser Pro Leu Glu Leu Ala Asp Val Asn Gly Asp					
	35		40		45
Gly Leu Arg Asp Val Leu Leu Ser Phe Val Met Ser Arg Asn Gly					
	50		55		60
Ser Ala Val Gly Val Ser Arg Pro Ala Ala Asn Leu Val Cys Leu					
	65		70		75
Ser Gly Met Asn Gly Ser Thr Leu Trp Ser Ser Leu Leu Pro Glu					
	80		85		90
Glu Ala Arg Asp Ile Thr Cys Leu Glu Leu Met Pro Gly Ser Leu					
	95		100		105
Ala Glu Thr Ile Cys Leu Val Thr Gly Thr His Lys Met Leu Ser					
	110		115		120
Ala Phe Asn Ala Thr Ser Gly Lys Ala Ile Trp Thr Leu Asn Pro					
	125		130		135
Asn Tyr Leu Ser Asn Gly Thr Leu Ala Ala Pro Val Val Val Leu					
	140		145		150
Pro Asp Leu Asp Glu Asp Gly Val Arg Asp Leu Val Val Leu Ala					
	155		160		165
Ile Gly Glu Leu Gln Pro Asp Leu Cys Phe Leu Leu Val Ser Gly					
	170		175		180
Arg Thr Gly Asn Pro Val Gly Arg Pro Val Lys Tyr Asn Ile Val					
	185		190		195
Gly Val Gly Asn Leu Ile Gly Pro Gln Val Tyr Ile Thr Thr Asn					
	200		205		210
Gly Ala Val Tyr Ile Leu Phe Gly Phe Gly Asn Ile Gln Ala Val					
	215		220		225
Ala Leu Arg Asp Ile Phe Val Gln Ala Gln Asn Arg Asp Ser Ser					
	230		235		240

Pro	Pro	Ser	Leu	Gln	Ile	Glu	Glu	Pro	Glu	Trp	Glu	Lys	Arg	Arg		245	250	255
Ser	Ile	Asn	Leu	Ser	Glu	Leu	Ile	Asp	Val	Tyr	Ser	Asp	Gly	Val		260	265	270
Glu	Leu	Leu	Gln	Met	Val	Lys	Ala	Pro	Asp	Ser	Asn	Cys	Ser	Asn		275	280	285
Leu	Leu	Ile	Thr	Thr	Arg	Gln	Ser	Leu	Val	Leu	Leu	Arg	Gly	Gln		290	295	300
Asn	Leu	Thr	Pro	Tyr	Trp	Ala	Leu	Arg	Leu	Gln	Gly	Leu	Arg	Ser		305	310	315
Gln	Pro	Thr	Pro	Gly	Tyr	Phe	Thr	Asp	Asp	Gln	Thr	Leu	Asp	Phe		320	325	330
Leu	Leu	Gln	Ile	Gln	Asp	Gly	Val	Gly	Met	Lys	Lys	Met	Met	Val		335	340	345
Val	Asp	Gly	Asp	Ser	Gly	Ser	Ile	Val	Trp	Ser	Tyr	Arg	Ala	Pro		350	355	360
Cys	His	Met	Lys	Glu	Thr	Pro	Ala	Thr	Ser	Ala	Val	Thr	Ser	Asp		365	370	375
Gln	Lys	Ser	Val	Phe	Leu	Phe	Trp	Ala	Glu	Gly	Leu	Ser	Ala	Ala		380	385	390
Ser	Pro	Asn	Ser	Asp	Ile	Ile	Leu	Gly	Thr	Glu	Pro	Pro	Ser	Leu		395	400	405
His	His	Leu	Tyr	Leu	Leu	His	Pro	Ala	Phe	Pro	Ser	Ile	Leu	Leu		410	415	420
Asp	Leu	Ala	Asn	Thr	Thr	Gly	Thr	Val	Thr	Ala	Ser	Glu	Val	Gly		425	430	435
Ile	Asn	Asp	Leu	Trp	Lys	Asp	Ala	Phe	Tyr	Val	Thr	Arg	Thr	Thr		440	445	450
Gly	Pro	Ser	Ser	Glu	Gly	His	Pro	Ala	Ala	Leu	Val	Val	Ser	Lys		455	460	465
Leu	Ser	Leu	Arg	Trp	Ala	Leu	Met	Glu	Gly	Gln	Met	Ala	Gln	Leu		470	475	480
Gln	Glu	Ser	Thr	Pro	Lys	Ile	Gly	Arg	Gly	Glu	Leu	Arg	Arg	Phe		485	490	495
Leu	Ser	Arg	Ile	Lys	Phe	Val	Glu	Ala	Pro	Tyr	Glu	Ile				500	505	

<210> 106  
 <211> 132  
 <212> PRT  
 <213> Homo sapien

<400> 106

Met	Ser	Asn	Lys	Phe	Leu	Gly	Thr	Trp	Lys	Leu	Val	Ser	Ser	Glu
1				5					10					15
Asn	Phe	Asp	Asp	Tyr	Met	Lys	Ala	Leu	Gly	Val	Gly	Leu	Ala	Thr
				20					25					30
Arg	Lys	Leu	Gly	Asn	Leu	Ala	Lys	Pro	Thr	Val	Ile	Ile	Ser	Lys
				35					40					45
Lys	Gly	Asp	Ile	Ile	Thr	Ile	Arg	Thr	Glu	Ser	Thr	Phe	Lys	Asn
				50					55					60
Thr	Glu	Ile	Ser	Phe	Lys	Leu	Gly	Gln	Glu	Phe	Glu	Glu	Thr	Thr
				65					70					75
Ala	Asp	Asn	Arg	Lys	Thr	Lys	Ser	Ile	Val	Thr	Leu	Gln	Arg	Gly
				80					85					90
Ser	Leu	Asn	Gln	Val	Gln	Arg	Trp	Asp	Gly	Lys	Glu	Thr	Thr	Ile
				95					100					105
Lys	Arg	Lys	Leu	Val	Asn	Gly	Lys	Met	Val	Ala	Glu	Cys	Lys	Met
				110					115					120
Lys	Gly	Val	Val	Cys	Thr	Arg	Ile	Tyr	Glu	Lys	Val			
				125					130					

<210> 107

<211> 518

<212> PRT

<213> Homo sapien

<400> 107

Met	Gly	Ala	Leu	Ala	Arg	Ala	Leu	Leu	Leu	Pro	Leu	Leu	Ala	Gln
1				5					10					15
Trp	Leu	Leu	Arg	Ala	Ala	Pro	Glu	Leu	Ala	Pro	Ala	Pro	Phe	Thr
				20					25					30
Leu	Pro	Leu	Arg	Val	Ala	Ala	Ala	Thr	Asn	Arg	Val	Val	Ala	Pro
				35					40					45
Thr	Pro	Gly	Pro	Gly	Thr	Pro	Ala	Glu	Arg	His	Ala	Asp	Gly	Leu
				50					55					60
Ala	Leu	Ala	Leu	Glu	Pro	Ala	Leu	Ala	Ser	Pro	Ala	Gly	Ala	Ala
				65					70					75
Asn	Phe	Leu	Ala	Met	Val	Asp	Asn	Leu	Gln	Gly	Asp	Ser	Gly	Arg
				80					85					90
Gly	Tyr	Tyr	Leu	Glu	Met	Leu	Ile	Gly	Thr	Pro	Pro	Gln	Lys	Leu
				95					100					105
Gln	Ile	Leu	Val	Asp	Thr	Gly	Ser	Ser	Asn	Phe	Ala	Val	Ala	Gly
				110					115					120

Thr	Pro	His	Ser	Tyr	Ile	Asp	Thr	Tyr	Phe	Asp	Thr	Glu	Arg	Ser	
				125					130					135	
Ser	Thr	Tyr	Arg	Ser	Lys	Gly	Phe	Asp	Val	Thr	Val	Lys	Tyr	Thr	
				140					145					150	
Gln	Gly	Ser	Trp	Thr	Gly	Phe	Val	Gly	Glu	Asp	Leu	Val	Thr	Ile	
				155					160					165	
Pro	Lys	Gly	Phe	Asn	Thr	Ser	Phe	Leu	Val	Asn	Ile	Ala	Thr	Ile	
				170					175					180	
Phe	Glu	Ser	Glu	Asn	Phe	Phe	Leu	Pro	Gly	Ile	Lys	Trp	Asn	Gly	
				185					190					195	
Ile	Leu	Gly	Leu	Ala	Tyr	Ala	Thr	Leu	Ala	Lys	Pro	Ser	Ser	Ser	
				200					205					210	
Leu	Glu	Thr	Phe	Phe	Asp	Ser	Leu	Val	Thr	Gln	Ala	Asn	Ile	Pro	
				215					220					225	
Asn	Val	Phe	Ser	Met	Gln	Met	Cys	Gly	Ala	Gly	Leu	Pro	Val	Ala	
				230					235					240	
Gly	Ser	Gly	Thr	Asn	Gly	Gly	Ser	Leu	Val	Leu	Gly	Gly	Ile	Glu	
				245					250					255	
Pro	Ser	Leu	Tyr	Lys	Gly	Asp	Ile	Trp	Tyr	Thr	Pro	Ile	Lys	Glu	
				260					265					270	
Glu	Trp	Tyr	Tyr	Gln	Ile	Glu	Ile	Leu	Lys	Leu	Glu	Ile	Gly	Gly	
				275					280					285	
Gln	Ser	Leu	Asn	Leu	Asp	Cys	Arg	Glu	Tyr	Asn	Ala	Asp	Lys	Ala	
				290					295					300	
Ile	Val	Asp	Ser	Gly	Thr	Thr	Leu	Leu	Arg	Leu	Pro	Gln	Lys	Val	
				305					310					315	
Phe	Asp	Ala	Val	Val	Glu	Ala	Val	Ala	Arg	Ala	Ser	Leu	Ile	Pro	
				320					325					330	
Glu	Phe	Ser	Asp	Gly	Phe	Trp	Thr	Gly	Ser	Gln	Leu	Ala	Cys	Trp	
				335					340					345	
Thr	Asn	Ser	Glu	Thr	Pro	Trp	Ser	Tyr	Phe	Pro	Lys	Ile	Ser	Ile	
				350					355					360	
Tyr	Leu	Arg	Asp	Glu	Asn	Ser	Ser	Arg	Ser	Phe	Arg	Ile	Thr	Ile	
				365					370					375	
Leu	Pro	Gln	Leu	Tyr	Ile	Gln	Pro	Met	Met	Gly	Ala	Gly	Leu	Asn	
				380					385					390	
Tyr	Glu	Cys	Tyr	Arg	Phe	Gly	Ile	Ser	Pro	Ser	Thr	Asn	Ala	Leu	
				395					400					405	
Val	Ile	Gly	Ala	Thr	Val	Met	Glu	Gly	Phe	Tyr	Val	Ile	Phe	Asp	

410	415	420
Arg Ala Gln Lys	Arg Val Gly Phe Ala Ala Ser Pro Cys Ala Glu	
425	430	435
Ile Ala Gly Ala	Ala Val Ser Glu Ile Ser Gly Pro Phe Ser Thr	
440	445	450
Glu Asp Val Ala	Ser Asn Cys Val Pro Ala Gln Ser Leu Ser Glu	
455	460	465
Pro Ile Leu Trp	Ile Val Ser Tyr Ala Leu Met Ser Val Cys Gly	
470	475	480
Ala Ile Leu Leu	Val Leu Ile Val Leu Leu Leu Leu Pro Phe Arg	
485	490	495
Cys Gln Arg Arg	Pro Arg Asp Pro Glu Val Val Asn Asp Glu Ser	
500	505	510
Ser Leu Val Arg	His Arg Trp Lys	
515		

<210> 108  
 <211> 440  
 <212> PRT  
 <213> Homo sapien

<400> 108

Met Ala Val Lys	Leu Gly Thr Leu Leu Leu Ala Leu Ala Leu Gly	
1	5	10 15
Leu Ala Gln Pro	Ala Ser Ala Arg Arg Lys Leu Leu Val Phe Leu	
20	25	30
Leu Asp Gly Phe	Arg Ser Asp Tyr Ile Ser Asp Glu Ala Leu Glu	
35	40	45
Ser Leu Pro Gly	Phe Lys Glu Ile Val Ser Arg Gly Val Lys Val	
50	55	60
Asp Tyr Leu Thr	Pro Asp Phe Pro Ser Leu Ser Tyr Pro Asn Tyr	
65	70	75
Tyr Thr Leu Met	Thr Gly Arg His Cys Glu Val His Gln Met Ile	
80	85	90
Gly Asn Tyr Met	Trp Asp Pro Thr Thr Asn Lys Ser Phe Asp Ile	
95	100	105
Gly Val Asn Lys	Asp Ser Leu Met Pro Leu Trp Trp Asn Gly Ser	
110	115	120
Glu Pro Leu Trp	Val Thr Leu Thr Lys Ala Lys Arg Lys Val Tyr	
125	130	135
Met Tyr Tyr Trp	Pro Gly Cys Glu Val Glu Ile Leu Gly Val Arg	
140	145	150



Pro Thr Tyr Cys	Leu Glu Tyr Lys Asn	Val Pro Thr Asp Ile Asn
155	160	165
Phe Ala Asn Ala	Val Ser Asp Ala Leu Asp	Ser Phe Lys Ser Gly
170	175	180
Arg Ala Asp Leu	Ala Ala Ile Tyr His Glu	Arg Ile Asp Val Glu
185	190	195
Gly His His Tyr	Gly Pro Ala Ser Pro Gln	Arg Lys Asp Ala Leu
200	205	210
Lys Ala Val Asp	Thr Val Leu Lys Tyr Met	Thr Lys Trp Ile Gln
215	220	225
Glu Arg Gly Leu	Gln Asp Arg Leu Asn Val	Ile Ile Phe Ser Asp
230	235	240
His Gly Met Thr	Asp Ile Phe Trp Met Asp	Lys Val Ile Glu Leu
245	250	255
Asn Lys Tyr Ile	Ser Leu Asn Asp Leu Gln	Gln Val Lys Asp Arg
260	265	270
Gly Pro Val Val	Ser Leu Trp Pro Ala Pro	Gly Lys His Ser Glu
275	280	285
Ile Tyr Asn Lys	Leu Ser Thr Val Glu His	Met Thr Val Tyr Glu
290	295	300
Lys Glu Ala Ile	Pro Ser Arg Phe Tyr Tyr	Lys Lys Gly Lys Phe
305	310	315
Val Ser Pro Leu	Thr Leu Val Ala Asp Glu	Gly Trp Phe Ile Thr
320	325	330
Glu Asn Arg Glu	Met Leu Pro Phe Trp Met	Asn Ser Thr Gly Arg
335	340	345
Arg Glu Gly Trp	Gln Arg Gly Trp His Gly	Tyr Asp Asn Glu Leu
350	355	360
Met Asp Met Arg	Gly Ile Phe Leu Ala Phe	Gly Pro Asp Phe Lys
365	370	375
Ser Asn Phe Arg	Ala Ala Pro Ile Arg Ser	Val Asp Val Tyr Asn
380	385	390
Val Met Cys Asn	Val Val Gly Ile Thr Pro	Leu Pro Asn Asn Gly
395	400	405
Ser Trp Ser Arg	Val Met Cys Met Leu Lys	Gly Arg Ala Gly Thr
410	415	420
Ala Pro Pro Val	Trp Pro Ser His Cys Ala	Leu Ala Leu Ile Leu
425	430	435
Leu Phe Leu Leu	Ala	

<210> 109  
 <211> 90  
 <212> PRT  
 <213> Homo sapien

<400> 109

Met	Lys	Phe	Leu	Ala	Val	Leu	Val	Leu	Leu	Gly	Val	Ser	Ile	Phe
1				5					10					15
Leu	Val	Ser	Ala	Gln	Asn	Pro	Thr	Thr	Ala	Ala	Pro	Ala	Asp	Thr
				20					25					30
Tyr	Pro	Ala	Thr	Gly	Pro	Ala	Asp	Asp	Glu	Ala	Pro	Asp	Ala	Glu
				35					40					45
Thr	Thr	Ala	Ala	Ala	Thr	Thr	Ala	Thr	Thr	Ala	Ala	Pro	Thr	Thr
				50					55					60
Ala	Thr	Thr	Ala	Ala	Ser	Thr	Thr	Ala	Arg	Lys	Asp	Ile	Pro	Val
				65					70					75
Leu	Pro	Lys	Trp	Val	Gly	Asp	Leu	Pro	Asn	Gly	Arg	Val	Cys	Pro
				80					85					90

<210> 110  
 <211> 256  
 <212> PRT  
 <213> Homo sapien

<400> 110

Met	Phe	Gln	Thr	Gly	Gly	Leu	Ile	Val	Phe	Tyr	Gly	Leu	Leu	Ala
1				5					10					15
Gln	Thr	Met	Ala	Gln	Phe	Gly	Gly	Leu	Pro	Val	Pro	Leu	Asp	Gln
				20					25					30
Thr	Leu	Pro	Leu	Asn	Val	Asn	Pro	Ala	Leu	Pro	Leu	Ser	Pro	Thr
				35					40					45
Gly	Leu	Ala	Gly	Ser	Leu	Thr	Asn	Ala	Leu	Ser	Asn	Gly	Leu	Leu
				50					55					60
Ser	Gly	Gly	Leu	Leu	Gly	Ile	Leu	Glu	Asn	Leu	Pro	Leu	Leu	Asp
				65					70					75
Ile	Leu	Lys	Pro	Gly	Gly	Gly	Thr	Ser	Gly	Gly	Leu	Leu	Gly	Gly
				80					85					90
Leu	Leu	Gly	Lys	Val	Thr	Ser	Val	Ile	Pro	Gly	Leu	Asn	Asn	Ile
				95					100					105
Ile	Asp	Ile	Lys	Val	Thr	Asp	Pro	Gln	Leu	Leu	Glu	Leu	Gly	Leu
				110					115					120
Val	Gln	Ser	Pro	Asp	Gly	His	Arg	Leu	Tyr	Val	Thr	Ile	Pro	Leu
				125					130					135

Gly	Ile	Lys	Leu	Gln	Val	Asn	Thr	Pro	Leu	Val	Gly	Ala	Ser	Leu	140	145	150
Leu	Arg	Leu	Ala	Val	Lys	Leu	Asp	Ile	Thr	Ala	Glu	Ile	Leu	Ala	155	160	165
Val	Arg	Asp	Lys	Gln	Glu	Arg	Ile	His	Leu	Val	Leu	Gly	Asp	Cys	170	175	180
Thr	His	Ser	Pro	Gly	Ser	Leu	Gln	Ile	Ser	Leu	Leu	Asp	Gly	Leu	185	190	195
Gly	Pro	Leu	Pro	Ile	Gln	Gly	Leu	Leu	Asp	Ser	Leu	Thr	Gly	Ile	200	205	210
Leu	Asn	Lys	Val	Leu	Pro	Glu	Leu	Val	Gln	Gly	Asn	Val	Cys	Pro	215	220	225
Leu	Val	Asn	Glu	Val	Leu	Arg	Gly	Leu	Asp	Ile	Thr	Leu	Val	His	230	235	240
Asp	Ile	Val	Asn	Met	Leu	Ile	His	Gly	Leu	Gln	Phe	Val	Ile	Lys	245	250	255

Val

<210> 111  
 <211> 775  
 <212> PRT  
 <213> Homo sapien

<400> 111

Met	Glu	Pro	Pro	Tyr	Ser	Leu	Thr	Ala	His	Tyr	Asp	Glu	Phe	Gln	1	5	10	15
Glu	Val	Lys	Tyr	Val	Ser	Arg	Cys	Gly	Ala	Gly	Gly	Ala	Arg	Gly	20	25	30	35
Ala	Ser	Leu	Pro	Pro	Gly	Phe	Pro	Leu	Gly	Ala	Ala	Arg	Ser	Val	35	40	45	50
Thr	Gly	Ala	Arg	Ser	Gly	Leu	Pro	Arg	Trp	Asn	Arg	Arg	Glu	Val	50	55	60	65
Cys	Leu	Leu	Ser	Gly	Leu	Val	Phe	Ala	Ala	Gly	Leu	Cys	Ala	Ile	65	70	75	80
Leu	Ala	Ala	Met	Leu	Ala	Leu	Lys	Tyr	Leu	Gly	Pro	Val	Ala	Ala	80	85	90	95
Gly	Gly	Gly	Ala	Cys	Pro	Glu	Gly	Cys	Pro	Glu	Arg	Lys	Ala	Phe	95	100	105	110
Ala	Arg	Ala	Ala	Arg	Phe	Leu	Ala	Ala	Asn	Leu	Asp	Ala	Ser	Ile	110	115	120	125
Asp	Pro	Cys	Gln	Asp	Phe	Tyr	Ser	Phe	Ala	Cys	Gly	Gly	Trp	Leu	125	130	135	140

	125		130		135
Arg Arg His Ala	Ile Pro Asp Asp Lys	Leu Thr Tyr Gly Thr	Ile		
	140		145		150
Ala Ala Ile Gly	Glu Gln Asn Glu Glu	Arg Leu Arg Arg Leu	Leu		
	155		160		165
Ala Arg Pro Gly	Gly Gly Pro Gly Gly	Ala Ala Gln Arg Lys	Val		
	170		175		180
Arg Ala Phe Phe	Arg Ser Cys Leu Asp	Met Arg Glu Ile Glu	Arg		
	185		190		195
Leu Gly Pro Arg	Pro Met Leu Glu Val	Ile Glu Asp Cys Gly	Gly		
	200		205		210
Trp Asp Leu Gly	Gly Ala Glu Glu Arg	Pro Gly Val Ala Ala	Arg		
	215		220		225
Trp Asp Leu Asn	Arg Leu Leu Tyr Lys	Ala Gln Gly Val Tyr	Ser		
	230		235		240
Ala Ala Ala Leu	Phe Ser Leu Thr Val	Ser Leu Asp Asp Arg	Asn		
	245		250		255
Ser Ser Arg Tyr	Val Ile Arg Ile Asp	Gln Asp Gly Leu Thr	Leu		
	260		265		270
Pro Glu Arg Thr	Leu Tyr Leu Ala Gln	Asp Glu Asp Ser Glu	Lys		
	275		280		285
Ile Leu Ala Ala	Tyr Arg Val Phe Met	Glu Arg Val Leu Ser	Leu		
	290		295		300
Leu Gly Ala Asp	Ala Val Glu Gln Lys	Ala Gln Glu Ile Leu	Gln		
	305		310		315
Val Glu Gln Gln	Leu Ala Asn Ile Thr	Val Ser Glu Tyr Asp	Asp		
	320		325		330
Leu Arg Arg Asp	Val Ser Ser Met Tyr	Asn Lys Val Thr Leu	Gly		
	335		340		345
Gln Leu Gln Lys	Ile Thr Pro His Leu	Arg Trp Lys Trp Leu	Leu		
	350		355		360
Asp Gln Ile Phe	Gln Glu Asp Phe Ser	Glu Glu Glu Glu Val	Val		
	365		370		375
Leu Leu Ala Thr	Asp Tyr Met Gln Gln	Val Ser Gln Leu Ile	Arg		
	380		385		390
Ser Thr Pro His	Arg Val Leu His Asn	Tyr Leu Val Trp Arg	Val		
	395		400		405
Val Val Val Leu	Ser Glu His Leu Ser	Pro Pro Phe Arg Glu	Ala		
	410		415		420

Leu His Glu Leu Ala Gln Glu Met Glu Gly Ser Asp Lys Pro Gln	425	430	435
Glu Leu Ala Arg Val Cys Leu Gly Gln Ala Asn Arg His Phe Gly	440	445	450
Met Ala Leu Gly Ala Leu Phe Val His Glu His Phe Ser Ala Ala	455	460	465
Ser Lys Ala Lys Val Gln Gln Leu Val Glu Asp Ile Lys Tyr Ile	470	475	480
Leu Gly Gln Arg Leu Glu Glu Leu Asp Trp Met Asp Ala Glu Thr	485	490	495
Arg Ala Ala Ala Arg Ala Lys Leu Gln Tyr Met Met Val Met Val	500	505	510
Gly Tyr Pro Asp Phe Leu Leu Lys Pro Asp Ala Val Asp Lys Glu	515	520	525
Tyr Glu Phe Glu Val His Glu Lys Thr Tyr Phe Lys Asn Ile Leu	530	535	540
Asn Ser Ile Pro Phe Ser Ile Gln Leu Ser Val Lys Lys Ile Arg	545	550	555
Gln Glu Val Asp Lys Ser Thr Trp Leu Leu Pro Pro Gln Ala Leu	560	565	570
Asn Ala Tyr Tyr Leu Pro Asn Lys Asn Gln Met Val Phe Pro Ala	575	580	585
Gly Ile Leu Gln Pro Thr Leu Tyr Asp Pro Asp Phe Pro Gln Ser	590	595	600
Leu Asn Tyr Gly Gly Ile Gly Thr Ile Ile Gly His Glu Leu Thr	605	610	615
His Gly Tyr Asp Asp Trp Gly Gly Gln Tyr Asp Arg Ser Gly Asn	620	625	630
Leu Leu His Trp Trp Thr Glu Ala Ser Tyr Ser Arg Phe Leu Arg	635	640	645
Lys Ala Glu Cys Ile Val Arg Leu Tyr Asp Asn Phe Thr Val Tyr	650	655	660
Asn Gln Arg Val Asn Gly Lys His Thr Leu Gly Glu Asn Ile Ala	665	670	675
Asp Met Gly Val Leu Lys Leu Ala Tyr His Ala Tyr Gln Lys Trp	680	685	690
Val Arg Glu His Gly Pro Glu His Pro Leu Pro Arg Leu Lys Tyr	695	700	705
Thr His Asp Gln Leu Phe Phe Ile Ala Phe Ala Gln Asn Trp Cys			

	710		715		720
Ile Lys Arg Arg Ser Gln Ser Ile Tyr	Leu Gln Val Leu Thr Asp				
725	730				735
Lys His Ala Pro Glu His Tyr Arg Val	Leu Gly Ser Val Ser Gln				
740	745				750
Phe Glu Glu Phe Gly Arg Ala Phe His	Cys Pro Lys Asp Ser Pro				
755	760				765
Met Asn Pro Ala His Lys Cys Ser Val	Trp				
770	775				

<210> 112  
 <211> 529  
 <212> PRT  
 <213> Homo sapien

<400> 112

Met Gly Pro Ser Cys Pro Val Phe Leu Ser Phe Thr Lys Leu Ser			
1	5	10	15
Leu Trp Trp Leu Leu Leu Thr Pro Ala Gly Gly Glu Glu Ala Lys			
20	25		30
Arg Pro Pro Pro Arg Ala Pro Gly Asp Pro Leu Ser Ser Pro Ser			
35	40		45
Pro Thr Ala Leu Pro Gln Gly Gly Ser His Thr Glu Thr Glu Asp			
50	55		60
Arg Leu Phe Lys His Leu Phe Arg Gly Tyr Asn Arg Trp Ala Arg			
65	70		75
Pro Val Pro Asn Thr Ser Asp Val Val Ile Val Arg Phe Gly Leu			
80	85		90
Ser Ile Ala Gln Leu Ile Asp Val Asp Glu Lys Asn Gln Met Met			
95	100		105
Thr Thr Asn Val Trp Leu Lys Gln Glu Trp Ser Asp Tyr Lys Leu			
110	115		120
Arg Trp Asn Pro Ala Asp Phe Gly Asn Ile Thr Ser Leu Arg Val			
125	130		135
Pro Ser Glu Met Ile Trp Ile Pro Asp Ile Val Leu Tyr Asn Asn			
140	145		150
Ala Asp Gly Glu Phe Ala Val Thr His Met Thr Lys Ala His Leu			
155	160		165
Phe Ser Thr Gly Thr Val His Trp Val Pro Pro Ala Ile Tyr Lys			
170	175		180
Ser Ser Cys Ser Ile Asp Val Thr Phe Phe Pro Phe Asp Gln Gln			
185	190		195

Asn Cys Lys Met	Lys Phe Gly Ser Trp	Thr Tyr Asp Lys Ala Lys	200	205	210
Ile Asp Leu Glu	Gln Met Glu Gln Thr	Val Asp Leu Lys Asp Tyr	215	220	225
Trp Glu Ser Gly	Glu Trp Ala Ile Val	Asn Ala Thr Gly Thr Tyr	230	235	240
Asn Ser Lys Lys	Tyr Asp Cys Cys Ala	Glu Ile Tyr Pro Asp Val	245	250	255
Thr Tyr Ala Phe	Val Ile Arg Arg Leu	Pro Leu Phe Tyr Thr Ile	260	265	270
Asn Leu Ile Ile	Pro Cys Leu Leu Ile	Ser Cys Leu Thr Val Leu	275	280	285
Val Phe Tyr Leu	Pro Ser Asp Cys Gly	Glu Lys Ile Thr Leu Cys	290	295	300
Ile Ser Val Leu	Leu Ser Leu Thr Val	Phe Leu Leu Leu Ile Thr	305	310	315
Glu Ile Ile Pro	Ser Thr Ser Leu Val	Ile Pro Leu Ile Gly Glu	320	325	330
Tyr Leu Leu Phe	Thr Met Ile Phe Val	Thr Leu Ser Ile Val Ile	335	340	345
Thr Val Phe Val	Leu Asn Val His His	Arg Ser Pro Ser Thr His	350	355	360
Thr Met Pro His	Trp Val Arg Gly Ala	Leu Leu Gly Cys Val Pro	365	370	375
Arg Trp Leu Leu	Met Asn Arg Pro Pro	Pro Pro Val Glu Leu Cys	380	385	390
His Pro Leu Arg	Leu Lys Leu Ser Pro	Ser Tyr His Trp Leu Glu	395	400	405
Ser Asn Val Asp	Ala Glu Glu Arg Glu	Val Val Val Glu Glu Glu	410	415	420
Asp Arg Trp Ala	Cys Ala Gly His Val	Ala Pro Ser Val Gly Thr	425	430	435
Leu Cys Ser His	Gly His Leu His Ser	Gly Ala Ser Gly Pro Lys	440	445	450
Ala Glu Ala Leu	Leu Gln Glu Gly Glu	Leu Leu Leu Ser Pro His	455	460	465
Met Gln Lys Ala	Leu Glu Gly Val His	Tyr Ile Ala Asp His Leu	470	475	480
Arg Ser Glu Asp	Ala Asp Ser Ser Val	Lys Glu Asp Trp Lys Tyr			

	485		490		495
Val Ala Met Val	Ile Asp Arg Ile Phe	Leu Trp Leu Phe Ile Ile			
	500		505		510
Val Cys Phe Leu	Gly Thr Ile Gly Leu	Phe Leu Pro Pro Phe Leu			
	515		520		525
Ala Gly Met Ile					
<210> 113					
<211> 202					
<212> PRT					
<213> Homo sapien					
<400> 113					
Met Leu Pro Pro	Gly Thr Ala Thr Leu	Leu Thr Leu Leu Ala			
1	5	10			15
Ala Gly Ser Leu	Gly Gln Lys Pro Gln	Arg Pro Arg Arg Pro Ala			
	20	25			30
Ser Pro Ile Ser	Thr Ile Gln Pro Lys	Ala Asn Phe Asp Ala Gln			
	35	40			45
Gln Phe Ala Gly	Thr Trp Leu Leu Val	Ala Val Gly Ser Ala Cys			
	50	55			60
Arg Phe Leu Gln	Glu Gln Gly His Arg	Ala Glu Ala Thr Thr Leu			
	65	70			75
His Val Ala Pro	Gln Gly Thr Ala Met	Ala Val Ser Thr Phe Arg			
	80	85			90
Lys Leu Asp Gly	Ile Cys Trp Gln Val	Arg Gln Leu Tyr Gly Asp			
	95	100			105
Thr Gly Val Leu	Gly Arg Phe Leu Leu	Gln Ala Arg Gly Ala Arg			
	110	115			120
Gly Ala Val Asn	Val Val Val Ala Glu	Thr Asp Tyr Gln Ser Phe			
	125	130			135
Ala Val Leu Tyr	Leu Glu Arg Ala Gly	Gln Leu Ser Val Lys Leu			
	140	145			150
Tyr Ala Arg Ser	Leu Pro Val Ser Asp	Ser Val Leu Ser Gly Phe			
	155	160			165
Glu Gln Arg Val	Gln Glu Ala His Leu	Thr Glu Asp Gln Ile Phe			
	170	175			180
Tyr Phe Pro Lys	Tyr Gly Phe Cys Glu	Ala Ala Asp Gln Phe His			
	185	190			195
Val Leu Asp Glu	Val Arg Arg				
	200				



<210> 114  
 <211> 267  
 <212> PRT  
 <213> Homo sapien

<400> 114  
 Met Arg Leu Thr Val Leu Cys Ala Val Cys Leu Leu Pro Gly Ser  
           1                  5                  10                  15  
 Leu Ala Leu Pro Leu Pro Gln Glu Ala Gly Gly Met Ser Glu Leu  
                   20                  25                  30  
 Gln Trp Glu Gln Ala Gln Asp Tyr Leu Lys Arg Phe Tyr Leu Tyr  
                   35                  40                  45  
 Asp Ser Glu Thr Lys Asn Ala Asn Ser Leu Glu Ala Lys Leu Lys  
                   50                  55                  60  
 Glu Met Gln Lys Phe Phe Gly Leu Pro Ile Thr Gly Met Leu Asn  
                   65                  70                  75  
 Ser Arg Val Ile Glu Ile Met Gln Lys Pro Arg Cys Gly Val Pro  
                   80                  85                  90  
 Asp Val Ala Glu Tyr Ser Leu Phe Pro Asn Ser Pro Lys Trp Thr  
                   95                  100                  105  
 Ser Lys Val Val Thr Tyr Arg Ile Val Ser Tyr Thr Arg Asp Leu  
                   110                  115                  120  
 Pro His Ile Thr Val Asp Arg Leu Val Ser Lys Ala Leu Asn Met  
                   125                  130                  135  
 Trp Gly Lys Glu Ile Pro Leu His Phe Arg Lys Val Val Trp Gly  
                   140                  145                  150  
 Thr Ala Asp Ile Met Ile Gly Phe Ala Arg Gly Ala His Gly Asp  
                   155                  160                  165  
 Ser Tyr Pro Phe Asp Gly Pro Gly Asn Thr Leu Ala His Ala Phe  
                   170                  175                  180  
 Ala Pro Gly Thr Gly Leu Gly Gly Asp Ala His Phe Asp Glu Asp  
                   185                  190                  195  
 Glu Arg Trp Thr Asp Gly Ser Ser Leu Gly Ile Asn Phe Leu Tyr  
                   200                  205                  210  
 Ala Ala Thr His Glu Leu Gly His Ser Leu Gly Met Gly His Ser  
                   215                  220                  225  
 Ser Asp Pro Asn Ala Val Met Tyr Pro Thr Tyr Gly Asn Gly Asp  
                   230                  235                  240  
 Pro Gln Asn Phe Lys Leu Ser Gln Asp Asp Ile Lys Gly Ile Gln  
                   245                  250                  255  
 Lys Leu Tyr Gly Lys Arg Ser Asn Ser Arg Lys Lys

<210> 115  
 <211> 314  
 <212> PRT  
 <213> Homo sapien

<400> 115

Met	Ala	Pro	Pro	Gln	Val	Leu	Ala	Phe	Gly	Leu	Leu	Leu	Ala	Ala	1	5	10	15
Ala	Thr	Ala	Thr	Phe	Ala	Ala	Ala	Gln	Glu	Glu	Cys	Val	Cys	Glu	20	25	30	
Asn	Tyr	Lys	Leu	Ala	Val	Asn	Cys	Phe	Val	Asn	Asn	Asn	Arg	Gln	35	40	45	
Cys	Gln	Cys	Thr	Ser	Val	Gly	Ala	Gln	Asn	Thr	Val	Ile	Cys	Ser	50	55	60	
Lys	Leu	Ala	Ala	Lys	Cys	Leu	Val	Met	Lys	Ala	Glu	Met	Asn	Gly	65	70	75	
Ser	Lys	Leu	Gly	Arg	Arg	Ala	Lys	Pro	Glu	Gly	Ala	Leu	Gln	Asn	80	85	90	
Asn	Asp	Gly	Leu	Tyr	Asp	Pro	Asp	Cys	Asp	Glu	Ser	Gly	Leu	Phe	95	100	105	
Lys	Ala	Lys	Gln	Cys	Asn	Gly	Thr	Ser	Thr	Cys	Trp	Cys	Val	Asn	110	115	120	
Thr	Ala	Gly	Val	Arg	Arg	Thr	Asp	Lys	Asp	Thr	Glu	Ile	Thr	Cys	125	130	135	
Ser	Glu	Arg	Val	Arg	Thr	Tyr	Trp	Ile	Ile	Ile	Glu	Leu	Lys	His	140	145	150	
Lys	Ala	Arg	Glu	Lys	Pro	Tyr	Asp	Ser	Lys	Ser	Leu	Arg	Thr	Ala	155	160	165	
Leu	Gln	Lys	Glu	Ile	Thr	Thr	Arg	Tyr	Gln	Leu	Asp	Pro	Lys	Phe	170	175	180	
Ile	Thr	Ser	Ile	Leu	Tyr	Glu	Asn	Asn	Val	Ile	Thr	Ile	Asp	Leu	185	190	195	
Val	Gln	Asn	Ser	Ser	Gln	Lys	Thr	Gln	Asn	Asp	Val	Asp	Ile	Ala	200	205	210	
Asp	Val	Ala	Tyr	Tyr	Phe	Glu	Lys	Asp	Val	Lys	Gly	Glu	Ser	Leu	215	220	225	
Phe	His	Ser	Lys	Lys	Met	Asp	Leu	Thr	Val	Asn	Gly	Glu	Gln	Leu	230	235	240	
Asp	Leu	Asp	Pro	Gly	Gln	Thr	Leu	Ile	Tyr	Tyr	Val	Asp	Glu	Lys	245	250	255	

Ala	Pro	Glu	Phe	Ser	Met	Gln	Gly	Leu	Lys	Ala	Gly	Val	Ile	Ala	
				260					265					270	
Val	Ile	Val	Val	Val	Val	Met	Ala	Val	Val	Ala	Gly	Ile	Val	Val	
				275					280					285	
Leu	Val	Ile	Ser	Arg	Lys	Lys	Arg	Met	Ala	Lys	Tyr	Glu	Lys	Ala	
				290					295					300	
Glu	Ile	Lys	Glu	Met	Gly	Glu	Met	His	Arg	Glu	Leu	Asn	Ala		
				305					310						

<210> 116  
 <211> 130  
 <212> PRT  
 <213> Homo sapien

<400> 116															
Met	Arg	Gln	Lys	Ala	Val	Ser	Val	Phe	Leu	Cys	Tyr	Leu	Leu	Leu	
1				5					10					15	
Phe	Thr	Cys	Ser	Gly	Val	Glu	Ala	Gly	Lys	Lys	Lys	Cys	Ser	Glu	
				20					25					30	
Ser	Ser	Asp	Ser	Gly	Ser	Gly	Phe	Trp	Lys	Ala	Leu	Thr	Phe	Met	
				35					40					45	
Ala	Val	Gly	Gly	Gly	Leu	Ala	Val	Ala	Gly	Leu	Pro	Ala	Leu	Gly	
				50					55					60	
Phe	Thr	Gly	Ala	Gly	Ile	Ala	Ala	Asn	Ser	Val	Ala	Ala	Ser	Leu	
				65					70					75	
Met	Ser	Trp	Ser	Ala	Ile	Leu	Asn	Gly	Gly	Gly	Val	Pro	Ala	Gly	
				80					85					90	
Gly	Leu	Val	Ala	Thr	Leu	Gln	Ser	Leu	Gly	Ala	Gly	Gly	Ser	Ser	
				95					100					105	
Val	Val	Ile	Gly	Asn	Ile	Gly	Ala	Leu	Met	Arg	Tyr	Ala	Thr	His	
				110					115					120	
Lys	Tyr	Leu	Asp	Ser	Glu	Glu	Asp	Glu	Glu						
				125					130						

<210> 117  
 <211> 799  
 <212> PRT  
 <213> Homo sapien

<400> 117															
Met	Pro	Arg	Ala	Pro	Ala	Pro	Leu	Tyr	Ala	Cys	Leu	Leu	Gly	Leu	
1				5					10					15	
Cys	Ala	Leu	Leu	Pro	Arg	Leu	Ala	Gly	Leu	Asn	Ile	Cys	Thr	Ser	
				20					25					30	
Gly	Ser	Ala	Thr	Ser	Cys	Glu	Glu	Cys	Leu	Leu	Ile	His	Pro	Lys	

	35	40	45
Cys Ala Trp Cys Ser Lys Glu Asp Phe Gly Ser Pro Arg Ser Ile	50	55	60
Thr Ser Arg Cys Asp Leu Arg Ala Asn Leu Val Lys Asn Gly Cys	65	70	75
Gly Gly Glu Ile Glu Ser Pro Ala Ser Ser Phe His Val Leu Arg	80	85	90
Ser Leu Pro Leu Ser Ser Lys Gly Ser Gly Ser Ala Gly Trp Asp	95	100	105
Val Ile Gln Met Thr Pro Gln Glu Ile Ala Val Asn Leu Arg Pro	110	115	120
Gly Asp Lys Thr Thr Phe Gln Leu Gln Val Arg Gln Val Glu Asp	125	130	135
Tyr Pro Val Asp Leu Tyr Tyr Leu Met Asp Leu Ser Leu Ser Met	140	145	150
Lys Asp Asp Leu Asp Asn Ile Arg Ser Leu Gly Thr Lys Leu Ala	155	160	165
Glu Glu Met Arg Lys Leu Thr Ser Asn Phe Arg Leu Gly Phe Gly	170	175	180
Ser Phe Val Asp Lys Asp Ile Ser Pro Phe Ser Tyr Thr Ala Pro	185	190	195
Arg Tyr Gln Thr Asn Pro Cys Ile Gly Tyr Lys Leu Phe Pro Asn	200	205	210
Cys Val Pro Ser Phe Gly Phe Arg His Leu Leu Pro Leu Thr Asp	215	220	225
Arg Val Asp Ser Phe Asn Glu Glu Val Arg Lys Gln Arg Val Ser	230	235	240
Arg Asn Arg Asp Ala Pro Glu Gly Gly Phe Asp Ala Val Leu Gln	245	250	255
Ala Ala Val Cys Lys Glu Lys Ile Gly Trp Arg Lys Asp Ala Leu	260	265	270
His Leu Leu Val Phe Thr Thr Asp Asp Val Pro His Ile Ala Leu	275	280	285
Asp Gly Lys Leu Gly Gly Leu Val Gln Pro His Asp Gly Gln Cys	290	295	300
His Leu Asn Glu Ala Asn Glu Tyr Thr Ala Ser Asn Gln Met Asp	305	310	315
Tyr Pro Ser Leu Ala Leu Leu Gly Glu Lys Leu Ala Glu Asn Asn	320	325	330

Ile Asn Leu Ile Phe Ala Val Thr Lys Asn His Tyr Met Leu Tyr	335	340	345
Lys Asn Phe Thr Ala Leu Ile Pro Gly Thr Thr Val Glu Ile Leu	350	355	360
Asp Gly Asp Ser Lys Asn Ile Ile Gln Leu Ile Ile Asn Ala Tyr	365	370	375
Asn Ser Ile Arg Ser Lys Val Glu Leu Ser Val Trp Asp Gln Pro	380	385	390
Glu Asp Leu Asn Leu Phe Phe Thr Ala Thr Cys Gln Asp Gly Val	395	400	405
Ser Tyr Pro Gly Gln Arg Lys Cys Glu Gly Leu Lys Ile Gly Asp	410	415	420
Thr Ala Ser Phe Glu Val Ser Leu Glu Ala Arg Ser Cys Pro Ser	425	430	435
Arg His Thr Glu His Val Phe Ala Leu Arg Pro Val Gly Phe Arg	440	445	450
Asp Ser Leu Glu Val Gly Val Thr Tyr Asn Cys Thr Cys Gly Cys	455	460	465
Ser Val Gly Leu Glu Pro Asn Ser Ala Arg Cys Asn Gly Ser Gly	470	475	480
Thr Tyr Val Cys Gly Leu Cys Glu Cys Ser Pro Gly Tyr Leu Gly	485	490	495
Thr Arg Cys Glu Cys Gln Asp Gly Glu Asn Gln Ser Val Tyr Gln	500	505	510
Asn Leu Cys Arg Glu Ala Glu Gly Lys Pro Leu Cys Ser Gly Arg	515	520	525
Gly Asp Cys Ser Cys Asn Gln Cys Ser Cys Phe Glu Ser Glu Phe	530	535	540
Gly Lys Ile Tyr Gly Pro Phe Cys Glu Cys Asp Asn Phe Ser Cys	545	550	555
Ala Arg Asn Lys Gly Val Leu Cys Ser Gly His Gly Glu Cys His	560	565	570
Cys Gly Glu Cys Lys Cys His Ala Gly Tyr Ile Gly Asp Asn Cys	575	580	585
Asn Cys Ser Thr Asp Ile Ser Thr Cys Arg Gly Arg Asp Gly Gln	590	595	600
Ile Cys Ser Glu Arg Gly His Cys Leu Cys Gly Gln Cys Gln Cys	605	610	615
Thr Glu Pro Gly Ala Phe Gly Glu Met Cys Glu Lys Cys Pro Thr			

620	625	630
Cys Pro Asp Ala Cys Ser Thr Lys Arg Asp Cys Val Glu Cys Leu		
635	640	645
Leu Leu His Ser Gly Lys Pro Asp Asn Gln Thr Cys His Ser Leu		
650	655	660
Cys Arg Asp Glu Val Ile Thr Trp Val Asp Thr Ile Val Lys Asp		
665	670	675
Asp Gln Glu Ala Val Leu Cys Phe Tyr Lys Thr Ala Lys Asp Cys		
680	685	690
Val Met Met Phe Thr Tyr Val Glu Leu Pro Ser Gly Lys Ser Asn		
695	700	705
Leu Thr Val Leu Arg Glu Pro Glu Cys Gly Asn Thr Pro Asn Ala		
710	715	720
Met Thr Ile Leu Leu Ala Val Val Gly Ser Ile Leu Leu Val Gly		
725	730	735
Leu Ala Leu Leu Ala Ile Trp Lys Leu Leu Val Thr Ile His Asp		
740	745	750
Arg Arg Glu Phe Ala Lys Phe Gln Ser Glu Arg Ser Arg Ala Arg		
755	760	765
Tyr Glu Met Ala Ser Asn Pro Leu Tyr Arg Lys Pro Ile Ser Thr		
770	775	780
His Thr Val Asp Phe Thr Phe Asn Lys Phe Asn Lys Ser Tyr Asn		
785	790	795

Gly Thr Val Asp

<210> 118  
 <211> 680  
 <212> PRT  
 <213> Homo sapien

<400> 118

Met	Leu	Pro	Gln	Ile	Pro	Phe	Leu	Leu	Leu	Val	Ser	Leu	Asn	Leu
1				5					10					15
Val	His	Gly	Val	Phe	Tyr	Ala	Glu	Arg	Tyr	Gln	Met	Pro	Thr	Gly
			20						25					30
Ile	Lys	Gly	Pro	Leu	Pro	Asn	Thr	Lys	Thr	Gln	Phe	Phe	Ile	Pro
			35						40					45
Tyr	Thr	Ile	Lys	Ser	Lys	Gly	Ile	Ala	Val	Arg	Gly	Glu	Gln	Gly
			50						55					60
Thr	Pro	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Pro	Arg	Gly	His	Pro	Gly
			65						70					75

Pro Ser Gly Pro	Pro Gly Lys Pro Gly Tyr Gly Ser Pro Gly Leu	80	85	90
Gln Gly Glu Pro	Gly Leu Pro Gly Pro Pro Gly Pro Ser Ala Val	95	100	105
Gly Lys Pro Gly	Val Pro Gly Leu Pro Gly Lys Pro Gly Glu Arg	110	115	120
Gly Pro Tyr Gly	Pro Lys Gly Asp Val Gly Pro Ala Gly Leu Pro	125	130	135
Gly Pro Arg Gly	Pro Pro Gly Pro Pro Gly Ile Pro Gly Pro Ala	140	145	150
Gly Ile Ser Val	Pro Gly Lys Pro Gly Gln Gln Gly Pro Thr Gly	155	160	165
Ala Pro Gly Pro	Arg Gly Phe Pro Gly Glu Lys Gly Ala Pro Gly	170	175	180
Val Pro Gly Met	Asn Gly Gln Lys Gly Glu Met Gly Tyr Gly Ala	185	190	195
Pro Gly Arg Pro	Gly Glu Arg Gly Leu Pro Gly Pro Gln Gly Pro	200	205	210
Thr Gly Pro Ser	Gly Pro Pro Gly Val Gly Lys Arg Gly Glu Asn	215	220	225
Gly Val Pro Gly	Gln Pro Gly Ile Lys Gly Asp Arg Gly Phe Pro	230	235	240
Gly Glu Met Gly	Pro Ile Gly Pro Pro Gly Pro Gln Gly Pro Pro	245	250	255
Gly Glu Arg Gly	Pro Glu Gly Ile Gly Lys Pro Gly Ala Ala Gly	260	265	270
Ala Pro Gly Gln	Pro Gly Ile Pro Gly Thr Lys Gly Leu Pro Gly	275	280	285
Ala Pro Gly Ile	Ala Gly Pro Pro Gly Pro Pro Gly Phe Gly Lys	290	295	300
Pro Gly Leu Pro	Gly Leu Lys Gly Glu Arg Gly Pro Ala Gly Leu	305	310	315
Pro Gly Gly Pro	Gly Ala Lys Gly Glu Gln Gly Pro Ala Gly Leu	320	325	330
Pro Gly Lys Pro	Gly Leu Thr Gly Pro Pro Gly Asn Met Gly Pro	335	340	345
Gln Gly Pro Lys	Gly Ile Pro Gly Ser His Gly Leu Pro Gly Pro	350	355	360
Lys Gly Glu Thr	Gly Pro Ala Gly Pro Ala Gly Tyr Pro Gly Ala			

365										370					375				
Lys	Gly	Glu	Arg	Gly	Ser	Pro	Gly	Ser	Asp	Gly	Lys	Pro	Gly	Tyr					
				380					385					390					
Pro	Gly	Lys	Pro	Gly	Leu	Asp	Gly	Pro	Lys	Gly	Asn	Pro	Gly	Leu					
				395					400					405					
Pro	Gly	Pro	Lys	Gly	Asp	Pro	Gly	Val	Gly	Gly	Pro	Pro	Gly	Leu					
				410					415					420					
Pro	Gly	Pro	Val	Gly	Pro	Ala	Gly	Ala	Lys	Gly	Met	Pro	Gly	His					
				425					430					435					
Asn	Gly	Glu	Ala	Gly	Pro	Arg	Gly	Ala	Pro	Gly	Ile	Pro	Gly	Thr					
				440					445					450					
Arg	Gly	Pro	Ile	Gly	Pro	Pro	Gly	Ile	Pro	Gly	Phe	Pro	Gly	Ser					
				455					460					465					
Lys	Gly	Asp	Pro	Gly	Ser	Pro	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Ile					
				470					475					480					
Ala	Thr	Lys	Gly	Leu	Asn	Gly	Pro	Thr	Gly	Pro	Pro	Gly	Pro	Pro					
				485					490					495					
Gly	Pro	Arg	Gly	His	Ser	Gly	Glu	Pro	Gly	Leu	Pro	Gly	Pro	Pro					
				500					505					510					
Gly	Pro	Pro	Gly	Pro	Pro	Gly	Gln	Ala	Val	Met	Pro	Glu	Gly	Phe					
				515					520					525					
Ile	Lys	Ala	Gly	Gln	Arg	Pro	Ser	Leu	Ser	Gly	Thr	Pro	Leu	Val					
				530					535					540					
Ser	Ala	Asn	Gln	Gly	Val	Thr	Gly	Met	Pro	Val	Ser	Ala	Phe	Thr					
				545					550					555					
Val	Ile	Leu	Ser	Lys	Ala	Tyr	Pro	Ala	Ile	Gly	Thr	Pro	Ile	Pro					
				560					565					570					
Phe	Asp	Lys	Ile	Leu	Tyr	Asn	Arg	Gln	Gln	His	Tyr	Asp	Pro	Arg					
				575					580					585					
Thr	Gly	Ile	Phe	Thr	Cys	Gln	Ile	Pro	Gly	Ile	Tyr	Tyr	Phe	Ser					
				590					595					600					
Tyr	His	Val	His	Val	Lys	Gly	Thr	His	Val	Trp	Val	Gly	Leu	Tyr					
				605					610					615					
Lys	Asn	Gly	Thr	Pro	Val	Met	Tyr	Thr	Tyr	Asp	Glu	Tyr	Thr	Lys					
				620					625					630					
Gly	Tyr	Leu	Asp	Gln	Ala	Ser	Gly	Ser	Ala	Ile	Ile	Asp	Leu	Thr					
				635					640					645					
Glu	Asn	Asp	Gln	Val	Trp	Leu	Gln	Leu	Pro	Asn	Ala	Glu	Ser	Asn					
				650					655					660					



Gly Leu Tyr Ser Ser Glu Tyr Val His Ser Ser Phe Ser Gly Phe  
665 670 675

Leu Val Ala Pro Met  
680

<210> 119

<211> 508

<212> PRT

<213> Homo sapien

<400> 119

Met Leu Leu Trp Ser Leu Leu Val Ile Phe Asp Ala Val Thr Glu  
1 5 10 15

Gln Ala Asp Ser Leu Thr Leu Val Ala Pro Ser Ser Val Phe Glu  
20 25 30

Gly Asp Ser Ile Val Leu Lys Cys Gln Gly Glu Gln Asn Trp Lys  
35 40 45

Ile Gln Lys Met Ala Tyr His Lys Asp Asn Lys Glu Leu Ser Val  
50 55 60

Phe Lys Lys Phe Ser Asp Phe Leu Ile Gln Ser Ala Val Leu Ser  
65 70 75

Asp Ser Gly Asn Tyr Phe Cys Ser Thr Lys Gly Gln Leu Phe Leu  
80 85 90

Trp Asp Lys Thr Ser Asn Ile Val Lys Ile Lys Val Gln Glu Leu  
95 100 105

Phe Gln Arg Pro Val Leu Thr Ala Ser Ser Phe Gln Pro Ile Glu  
110 115 120

Gly Gly Pro Val Ser Leu Lys Cys Glu Thr Arg Leu Ser Pro Gln  
125 130 135

Arg Leu Asp Val Gln Leu Gln Phe Cys Phe Phe Arg Glu Asn Gln  
140 145 150

Val Leu Gly Ser Gly Trp Ser Ser Ser Pro Glu Leu Gln Ile Ser  
155 160 165

Ala Val Trp Ser Glu Asp Thr Gly Ser Tyr Trp Cys Lys Ala Glu  
170 175 180

Thr Val Thr His Arg Ile Arg Lys Gln Ser Leu Gln Ser Gln Ile  
185 190 195

His Val Gln Arg Ile Pro Ile Ser Asn Val Ser Leu Glu Ile Arg  
200 205 210

Ala Pro Gly Gly Gln Val Thr Glu Gly Gln Lys Leu Ile Leu Leu  
215 220 225

Cys Ser Val Ala Gly Gly Thr Gly Asn Val Thr Phe Ser Trp Tyr

230	235	240
Arg Glu Ala Thr Gly Thr Ser Met Gly Lys Lys Thr Gln Arg Ser		
245	250	255
Leu Ser Ala Glu Leu Glu Ile Pro Ala Val Lys Glu Ser Asp Ala		
260	265	270
Gly Lys Tyr Tyr Cys Arg Ala Asp Asn Gly His Val Pro Ile Gln		
275	280	285
Ser Lys Val Val Asn Ile Pro Val Arg Ile Pro Val Ser Arg Pro		
290	295	300
Val Leu Thr Leu Arg Ser Pro Gly Ala Gln Ala Ala Val Gly Asp		
305	310	315
Leu Leu Glu Leu His Cys Glu Ala Leu Arg Gly Ser Pro Pro Ile		
320	325	330
Leu Tyr Gln Phe Tyr His Glu Asp Val Thr Leu Gly Asn Ser Ser		
335	340	345
Ala Pro Ser Gly Gly Gly Ala Ser Phe Asn Leu Ser Leu Thr Ala		
350	355	360
Glu His Ser Gly Asn Tyr Ser Cys Glu Ala Asn Asn Gly Leu Gly		
365	370	375
Ala Gln Cys Ser Glu Ala Val Pro Val Ser Ile Ser Gly Pro Asp		
380	385	390
Gly Tyr Arg Arg Asp Leu Met Thr Ala Gly Val Leu Trp Gly Leu		
395	400	405
Phe Gly Val Leu Gly Phe Thr Gly Val Ala Leu Leu Leu Tyr Ala		
410	415	420
Leu Phe His Lys Ile Ser Gly Glu Ser Ser Ala Thr Asn Glu Pro		
425	430	435
Arg Gly Ala Ser Arg Pro Asn Pro Gln Glu Phe Thr Tyr Ser Ser		
440	445	450
Pro Thr Pro Asp Met Glu Glu Leu Gln Pro Val Tyr Val Asn Val		
455	460	465
Gly Ser Val Asp Val Asp Val Val Tyr Ser Gln Val Trp Ser Met		
470	475	480
Gln Gln Pro Glu Ser Ser Ala Asn Ile Arg Thr Leu Leu Glu Asn		
485	490	495
Lys Asp Ser Gln Val Ile Tyr Ser Ser Val Lys Lys Ser		
500	505	

<210> 120  
<211> 386

<212> PRT

<213> Homo sapien

<400> 120

Leu	Arg	Gln	Gly	Leu	Ser	Gly	Gly	Gly	Gly	Ser	Leu	Ala	Ser	Gly	
1				5					10					15	
Gly	Pro	Gly	Pro	Gly	His	Ala	Ser	Leu	Ser	Gln	Arg	Leu	Arg	Leu	
				20					25					30	
Tyr	Leu	Ala	Asp	Ser	Trp	Asn	Gln	Cys	Asp	Leu	Val	Ala	Leu	Thr	
				35					40					45	
Cys	Phe	Leu	Leu	Gly	Val	Gly	Cys	Arg	Leu	Thr	Pro	Gly	Leu	Tyr	
				50					55					60	
His	Leu	Gly	Arg	Thr	Val	Leu	Cys	Ile	Asp	Phe	Met	Val	Phe	Thr	
				65					70					75	
Val	Arg	Leu	Leu	His	Ile	Phe	Thr	Val	Asn	Lys	Gln	Leu	Gly	Pro	
				80					85					90	
Lys	Ile	Val	Ile	Val	Ser	Lys	Met	Met	Lys	Asp	Val	Phe	Phe	Phe	
				95					100					105	
Leu	Phe	Phe	Leu	Gly	Val	Trp	Leu	Val	Ala	Tyr	Gly	Val	Ala	Thr	
				110					115					120	
Glu	Gly	Leu	Leu	Arg	Pro	Arg	Asp	Ser	Asp	Phe	Pro	Ser	Ile	Leu	
				125					130					135	
Arg	Arg	Val	Phe	Tyr	Arg	Pro	Tyr	Leu	Gln	Ile	Phe	Gly	Gln	Ile	
				140					145					150	
Pro	Gln	Glu	Asp	Met	Asp	Val	Ala	Leu	Met	Glu	His	Ser	Asn	Cys	
				155					160					165	
Ser	Ser	Glu	Pro	Gly	Phe	Trp	Ala	His	Pro	Pro	Gly	Ala	Gln	Ala	
				170					175					180	
Gly	Thr	Cys	Val	Ser	Gln	Tyr	Ala	Asn	Trp	Leu	Val	Val	Leu	Leu	
				185					190					195	
Leu	Val	Ile	Phe	Leu	Leu	Val	Ala	Asn	Ile	Leu	Leu	Val	Asn	Leu	
				200					205					210	
Leu	Ile	Ala	Met	Phe	Ser	Tyr	Thr	Phe	Gly	Lys	Val	Gln	Gly	Asn	
				215					220					225	
Ser	Asp	Leu	Tyr	Trp	Lys	Ala	Gln	Arg	Tyr	Arg	Leu	Ile	Arg	Glu	
				230					235					240	
Phe	His	Ser	Arg	Pro	Ala	Leu	Ala	Pro	Pro	Phe	Ile	Val	Ile	Ser	
				245					250					255	
His	Leu	Arg	Leu	Leu	Leu	Arg	Gln	Leu	Cys	Arg	Arg	Pro	Arg	Ser	
				260					265					270	

Pro	Gln	Pro	Ser	Ser	Pro	Ala	Leu	Glu	His	Phe	Arg	Val	Tyr	Leu	
				275					280					285	
Ser	Lys	Glu	Ala	Glu	Arg	Lys	Leu	Leu	Thr	Trp	Glu	Ser	Val	His	
				290					295					300	
Lys	Glu	Asn	Phe	Leu	Leu	Ala	Arg	Ala	Arg	Asp	Lys	Arg	Glu	Ser	
				305					310					315	
Asp	Ser	Glu	Arg	Leu	Lys	Arg	Thr	Ser	Gln	Lys	Val	Asp	Leu	Ala	
				320					325					330	
Leu	Lys	Gln	Leu	Gly	His	Ile	Arg	Glu	Tyr	Glu	Gln	Arg	Leu	Lys	
				335					340					345	
Val	Leu	Glu	Arg	Glu	Val	Gln	Gln	Cys	Ser	Arg	Val	Leu	Gly	Trp	
				350					355					360	
Val	Ala	Glu	Ala	Leu	Ser	Arg	Ser	Ala	Leu	Leu	Pro	Pro	Gly	Gly	
				365					370					375	
Pro	Pro	Pro	Pro	Asp	Leu	Pro	Gly	Ser	Lys	Asp					
				380					385						

<210> 121  
 <211> 529  
 <212> PRT  
 <213> Homo sapien

<400> 121

Met	Gly	Pro	Ser	Cys	Pro	Val	Phe	Leu	Ser	Phe	Thr	Lys	Leu	Ser	
1				5					10					15	
Leu	Trp	Trp	Leu	Leu	Leu	Thr	Pro	Ala	Gly	Gly	Glu	Glu	Ala	Lys	
				20					25					30	
Arg	Pro	Pro	Pro	Arg	Ala	Pro	Gly	Asp	Pro	Leu	Ser	Ser	Pro	Ser	
				35					40					45	
Pro	Thr	Ala	Leu	Pro	Gln	Gly	Gly	Ser	His	Thr	Glu	Thr	Glu	Asp	
				50					55					60	
Arg	Leu	Phe	Lys	His	Leu	Phe	Arg	Gly	Tyr	Asn	Arg	Trp	Ala	Arg	
				65					70					75	
Pro	Val	Pro	Asn	Thr	Ser	Asp	Val	Val	Ile	Val	Arg	Phe	Gly	Leu	
				80					85					90	
Ser	Ile	Ala	Gln	Leu	Ile	Asp	Val	Asp	Glu	Lys	Asn	Gln	Met	Met	
				95					100					105	
Thr	Thr	Asn	Val	Trp	Leu	Lys	Gln	Glu	Trp	Ser	Asp	Tyr	Lys	Leu	
				110					115					120	
Arg	Trp	Asn	Pro	Ala	Asp	Phe	Gly	Asn	Ile	Thr	Ser	Leu	Arg	Val	
				125					130					135	
Pro	Ser	Glu	Met	Ile	Trp	Ile	Pro	Asp	Ile	Val	Leu	Tyr	Asn	Asn	

140	145	150
Ala Asp Gly Glu Phe Ala Val Thr His Met Thr Lys Ala His Leu		
155	160	165
Phe Ser Thr Gly Thr Val His Trp Val Pro Pro Ala Ile Tyr Lys		
170	175	180
Ser Ser Cys Ser Ile Asp Val Thr Phe Phe Pro Phe Asp Gln Gln		
185	190	195
Asn Cys Lys Met Lys Phe Gly Ser Trp Thr Tyr Asp Lys Ala Lys		
200	205	210
Ile Asp Leu Glu Gln Met Glu Gln Thr Val Asp Leu Lys Asp Tyr		
215	220	225
Trp Glu Ser Gly Glu Trp Ala Ile Val Asn Ala Thr Gly Thr Tyr		
230	235	240
Asn Ser Lys Lys Tyr Asp Cys Cys Ala Glu Ile Tyr Pro Asp Val		
245	250	255
Thr Tyr Ala Phe Val Ile Arg Arg Leu Pro Leu Phe Tyr Thr Ile		
260	265	270
Asn Leu Ile Ile Pro Cys Leu Leu Ile Ser Cys Leu Thr Val Leu		
275	280	285
Val Phe Tyr Leu Pro Ser Asp Cys Gly Glu Lys Ile Thr Leu Cys		
290	295	300
Ile Ser Val Leu Leu Ser Leu Thr Val Phe Leu Leu Leu Ile Thr		
305	310	315
Glu Ile Ile Pro Ser Thr Ser Leu Val Ile Pro Leu Ile Gly Glu		
320	325	330
Tyr Leu Leu Phe Thr Met Ile Phe Val Thr Leu Ser Ile Val Ile		
335	340	345
Thr Val Phe Val Leu Asn Val His His Arg Ser Pro Ser Thr His		
350	355	360
Thr Met Pro His Trp Val Arg Gly Ala Leu Leu Gly Cys Val Pro		
365	370	375
Arg Trp Leu Leu Met Asn Arg Pro Pro Pro Pro Val Glu Leu Cys		
380	385	390
His Pro Leu Arg Leu Lys Leu Ser Pro Ser Tyr His Trp Leu Glu		
395	400	405
Ser Asn Val Asp Ala Glu Glu Arg Glu Val Val Val Glu Glu Glu		
410	415	420
Asp Arg Trp Ala Cys Ala Gly His Val Ala Pro Ser Val Gly Thr		
425	430	435

Leu Cys Ser His Gly His Leu His Ser Gly Ala Ser Gly Pro Lys  
 440 445 450  
 Ala Glu Ala Leu Leu Gln Glu Gly Glu Leu Leu Leu Ser Pro His  
 455 460 465  
 Met Gln Lys Ala Leu Glu Gly Val His Tyr Ile Ala Asp His Leu  
 470 475 480  
 Arg Ser Glu Asp Ala Asp Ser Ser Val Lys Glu Asp Trp Lys Tyr  
 485 490 495  
 Val Ala Met Val Ile Asp Arg Ile Phe Leu Trp Leu Phe Ile Ile  
 500 505 510  
 Val Cys Phe Leu Gly Thr Ile Gly Leu Phe Leu Pro Pro Phe Leu  
 515 520 525  
 Ala Gly Met Ile

<210> 122  
 <211> 339  
 <212> PRT  
 <213> Homo sapien

<400> 122  
 Met Glu Ser Arg Lys Asp Ile Thr Asn Gln Glu Glu Leu Trp Lys  
 1 5 10 15  
 Met Lys Pro Arg Arg Asn Leu Glu Glu Asp Asp Tyr Leu His Lys  
 20 25 30  
 Asp Thr Gly Glu Thr Ser Met Leu Lys Arg Pro Val Leu Leu His  
 35 40 45  
 Leu His Gln Thr Ala His Ala Asp Glu Phe Asp Cys Pro Ser Glu  
 50 55 60  
 Leu Gln His Thr Gln Glu Leu Phe Pro Gln Trp His Leu Pro Ile  
 65 70 75  
 Lys Ile Ala Ala Ile Ile Ala Ser Leu Thr Phe Leu Tyr Thr Leu  
 80 85 90  
 Leu Arg Glu Val Ile His Pro Leu Ala Thr Ser His Gln Gln Tyr  
 95 100 105  
 Phe Tyr Lys Ile Pro Ile Leu Val Ile Asn Lys Val Leu Pro Met  
 110 115 120  
 Val Ser Ile Thr Leu Leu Ala Leu Val Tyr Leu Pro Gly Val Ile  
 125 130 135  
 Ala Ala Ile Val Gln Leu His Asn Gly Thr Lys Tyr Lys Lys Phe  
 140 145 150  
 Pro His Trp Leu Asp Lys Trp Met Leu Thr Arg Lys Gln Phe Gly

155	160	165
Leu Leu Ser Phe Phe Phe Ala Val Leu His Ala Ile Tyr Ser Leu		
170	175	180
Ser Tyr Pro Met Arg Arg Ser Tyr Arg Tyr Lys Leu Leu Asn Trp		
185	190	195
Ala Tyr Gln Gln Val Gln Gln Asn Lys Glu Asp Ala Trp Ile Glu		
200	205	210
His Asp Val Trp Arg Met Glu Ile Tyr Val Ser Leu Gly Ile Val		
215	220	225
Gly Leu Ala Ile Leu Ala Leu Leu Ala Val Thr Ser Ile Pro Ser		
230	235	240
Val Ser Asp Ser Leu Thr Trp Arg Glu Phe His Tyr Ile Gln Ser		
245	250	255
Lys Leu Gly Ile Val Ser Leu Leu Leu Gly Thr Ile His Ala Leu		
260	265	270
Ile Phe Ala Trp Asn Lys Trp Ile Asp Ile Lys Gln Phe Val Trp		
275	280	285
Tyr Thr Pro Pro Thr Phe Met Ile Ala Val Phe Leu Pro Ile Val		
290	295	300
Val Leu Ile Phe Lys Ser Ile Leu Phe Leu Pro Cys Leu Arg Lys		
305	310	315
Lys Ile Leu Lys Ile Arg His Gly Trp Glu Asp Val Thr Lys Ile		
320	325	330
Asn Lys Thr Glu Ile Cys Ser Gln Leu		
335		

<210> 123  
 <211> 1127  
 <212> PRT  
 <213> Homo sapien

<400> 123  
 Met His Asn Thr Thr Glu Lys Pro Thr Asp Ala Tyr Gly Glu Leu  
 1 5 10 15  
 Asp Phe Thr Gly Ala Gly Arg Lys His Ser Asn Phe Leu Arg Leu  
 20 25 30  
 Ser Asp Arg Thr Asp Pro Ala Ala Val Tyr Ser Leu Val Thr Arg  
 35 40 45  
 Thr Trp Gly Phe Arg Ala Pro Asn Leu Val Val Ser Val Leu Gly  
 50 55 60  
 Gly Ser Gly Gly Pro Val Leu Gln Thr Trp Leu Gln Asp Leu Leu  
 65 70 75

Arg Arg Gly Leu Val Arg Ala Ala Gln Ser Thr Gly Ala Trp Ile	80	85	90
Val Thr Gly Gly Leu His Thr Gly Ile Gly Arg His Val Gly Val	95	100	105
Ala Val Arg Asp His Gln Met Ala Ser Thr Gly Gly Thr Lys Val	110	115	120
Val Ala Met Gly Val Ala Pro Trp Gly Val Val Arg Asn Arg Asp	125	130	135
Thr Leu Ile Asn Pro Lys Gly Ser Phe Pro Ala Arg Tyr Arg Trp	140	145	150
Arg Gly Asp Pro Glu Asp Gly Val Gln Phe Pro Leu Asp Tyr Asn	155	160	165
Tyr Ser Ala Phe Phe Leu Val Asp Asp Gly Thr His Gly Cys Leu	170	175	180
Gly Gly Glu Asn Arg Phe Arg Leu Arg Leu Glu Ser Tyr Ile Ser	185	190	195
Gln Gln Lys Thr Gly Val Gly Gly Thr Gly Ile Asp Ile Pro Val	200	205	210
Leu Leu Leu Leu Ile Asp Gly Asp Glu Lys Met Leu Thr Arg Ile	215	220	225
Glu Asn Ala Thr Gln Ala Gln Leu Pro Cys Leu Leu Val Ala Gly	230	235	240
Ser Gly Gly Ala Ala Asp Cys Leu Ala Glu Thr Leu Glu Asp Thr	245	250	255
Leu Ala Pro Gly Ser Gly Gly Ala Arg Gln Gly Glu Ala Arg Asp	260	265	270
Arg Ile Arg Arg Phe Phe Pro Lys Gly Asp Leu Glu Val Leu Gln	275	280	285
Ala Gln Val Glu Arg Ile Met Thr Arg Lys Glu Leu Leu Thr Val	290	295	300
Tyr Ser Ser Glu Asp Gly Ser Glu Glu Phe Glu Thr Ile Val Leu	305	310	315
Lys Ala Leu Val Lys Ala Cys Gly Ser Ser Glu Ala Ser Ala Tyr	320	325	330
Leu Asp Glu Leu Arg Leu Ala Val Ala Trp Asn Arg Val Asp Ile	335	340	345
Ala Gln Ser Glu Leu Phe Arg Gly Asp Ile Gln Trp Arg Ser Phe	350	355	360
His Leu Glu Ala Ser Leu Met Asp Ala Leu Leu Asn Asp Arg Pro			



365		370		375
Glu Phe Val Arg	Leu Leu Ile Ser His	Gly Leu Ser Leu Gly His		
	380	385		390
Phe Leu Thr Pro	Met Arg Leu Ala Gln	Leu Tyr Ser Ala Ala Pro		
	395	400		405
Ser Asn Ser Leu	Ile Arg Asn Leu Leu	Asp Gln Ala Ser His Ser		
	410	415		420
Ala Gly Thr Lys	Ala Pro Ala Leu Lys	Gly Gly Ala Ala Glu Leu		
	425	430		435
Arg Pro Pro Asp	Val Gly His Val Leu	Arg Met Leu Leu Gly Lys		
	440	445		450
Met Cys Ala Pro	Arg Tyr Pro Ser Gly	Gly Ala Trp Asp Pro His		
	455	460		465
Pro Gly Gln Gly	Phe Gly Glu Ser Met	Tyr Leu Leu Ser Asp Lys		
	470	475		480
Ala Thr Ser Pro	Leu Ser Leu Asp Ala	Gly Leu Gly Gln Ala Pro		
	485	490		495
Trp Ser Asp Leu	Leu Leu Trp Ala Leu	Leu Leu Asn Arg Ala Gln		
	500	505		510
Met Ala Met Tyr	Phe Trp Glu Met Gly	Ser Asn Ala Val Ser Ser		
	515	520		525
Ala Leu Gly Ala	Cys Leu Leu Leu Arg	Val Met Ala Arg Leu Glu		
	530	535		540
Pro Asp Ala Glu	Glu Ala Ala Arg Arg	Lys Asp Leu Ala Phe Lys		
	545	550		555
Phe Glu Gly Met	Gly Val Asp Leu Phe	Gly Glu Cys Tyr Arg Ser		
	560	565		570
Ser Glu Val Arg	Ala Ala Arg Leu Leu	Leu Arg Arg Cys Pro Leu		
	575	580		585
Trp Gly Asp Ala	Thr Cys Leu Gln Leu	Ala Met Gln Ala Asp Ala		
	590	595		600
Arg Ala Phe Phe	Ala Gln Asp Gly Val	Gln Ser Leu Leu Thr Gln		
	605	610		615
Lys Trp Trp Gly	Asp Met Ala Ser Thr	Thr Pro Ile Trp Ala Leu		
	620	625		630
Val Leu Ala Phe	Phe Cys Pro Pro Leu	Ile Tyr Thr Arg Leu Ile		
	635	640		645
Thr Phe Arg Lys	Ser Glu Glu Glu Pro	Thr Arg Glu Glu Leu Glu		
	650	655		660

Phe	Asp	Met	Asp	Ser	Val	Ile	Asn	Gly	Glu	Gly	Pro	Val	Gly	Thr	665	670	675
Ala	Asp	Pro	Ala	Glu	Lys	Thr	Pro	Leu	Gly	Val	Pro	Arg	Gln	Ser	680	685	690
Gly	Arg	Pro	Gly	Cys	Cys	Gly	Gly	Arg	Cys	Gly	Gly	Arg	Arg	Cys	695	700	705
Leu	Arg	Arg	Trp	Phe	His	Phe	Trp	Gly	Ala	Pro	Val	Thr	Ile	Phe	710	715	720
Met	Gly	Asn	Val	Val	Ser	Tyr	Leu	Leu	Phe	Leu	Leu	Leu	Phe	Ser	725	730	735
Arg	Val	Leu	Leu	Val	Asp	Phe	Gln	Pro	Ala	Pro	Pro	Gly	Ser	Leu	740	745	750
Glu	Leu	Leu	Leu	Tyr	Phe	Trp	Ala	Phe	Thr	Leu	Leu	Cys	Glu	Glu	755	760	765
Leu	Arg	Gln	Gly	Leu	Ser	Gly	Gly	Gly	Gly	Ser	Leu	Ala	Ser	Gly	770	775	780
Gly	Pro	Gly	Pro	Gly	His	Ala	Ser	Leu	Ser	Gln	Arg	Leu	Arg	Leu	785	790	795
Tyr	Leu	Ala	Asp	Ser	Trp	Asn	Gln	Cys	Asp	Leu	Val	Ala	Leu	Thr	800	805	810
Cys	Phe	Leu	Leu	Gly	Val	Gly	Cys	Arg	Leu	Thr	Pro	Gly	Leu	Tyr	815	820	825
His	Leu	Gly	Arg	Thr	Val	Leu	Cys	Ile	Asp	Phe	Met	Val	Phe	Thr	830	835	840
Val	Arg	Leu	Leu	His	Ile	Phe	Thr	Val	Asn	Lys	Gln	Leu	Gly	Pro	845	850	855
Lys	Ile	Val	Ile	Val	Ser	Lys	Met	Met	Lys	Asp	Val	Phe	Phe	Phe	860	865	870
Leu	Phe	Phe	Leu	Gly	Val	Trp	Leu	Val	Ala	Tyr	Gly	Val	Ala	Thr	875	880	885
Glu	Gly	Leu	Leu	Arg	Pro	Arg	Asp	Ser	Asp	Phe	Pro	Ser	Ile	Leu	890	895	900
Arg	Arg	Val	Phe	Tyr	Arg	Pro	Tyr	Leu	Gln	Ile	Phe	Gly	Gln	Ile	905	910	915
Pro	Gln	Glu	Asp	Met	Asp	Val	Ala	Leu	Met	Glu	His	Ser	Asn	Cys	920	925	930
Ser	Ser	Glu	Pro	Gly	Phe	Trp	Ala	His	Pro	Pro	Gly	Ala	Gln	Ala	935	940	945
Gly	Thr	Cys	Val	Ser	Gln	Tyr	Ala	Asn	Trp	Leu	Val	Val	Leu	Leu			

950	955	960
Leu Val Ile Phe Leu Leu Val Ala Asn Ile Leu Leu Val Asn Leu		
965	970	975
Leu Ile Ala Met Phe Ser Tyr Thr Phe Gly Lys Val Gln Gly Asn		
980	985	990
Ser Asp Leu Tyr Trp Lys Ala Gln Arg Tyr Arg Leu Ile Arg Glu		
995	1000	1005
Phe His Ser Arg Pro Ala Leu Ala Pro Pro Phe Ile Val Ile Ser		
1010	1015	1020
His Leu Arg Leu Leu Leu Arg Gln Leu Cys Arg Arg Pro Arg Ser		
1025	1030	1035
Pro Gln Pro Ser Ser Pro Ala Leu Glu His Phe Arg Val Tyr Leu		
1040	1045	1050
Ser Lys Glu Ala Glu Arg Lys Leu Leu Thr Trp Glu Ser Val His		
1055	1060	1065
Lys Glu Asn Phe Leu Leu Ala Arg Ala Arg Asp Lys Arg Glu Ser		
1070	1075	1080
Asp Ser Glu Arg Leu Glu Arg Thr Ser Gln Lys Val Asp Leu Ala		
1085	1090	1095
Leu Lys Gln Leu Gly His Ile Arg Glu Tyr Glu Gln Arg Leu Lys		
1100	1105	1110
Val Leu Glu Arg Glu Val Gln Gln Cys Ser Arg Val Leu Gly Trp		
1115	1120	1125

Val Thr

<210> 124  
 <211> 1932  
 <212> PRT  
 <213> Homo sapien

<400> 124

Met	His	Leu	His	Arg	Arg	Phe	Thr	Asp	Leu	Ile	Trp	Lys	Asn	Leu
1				5					10					15
Cys	Pro	Ala	Leu	Ile	Val	Ile	Leu	Gly	Asn	Pro	Ile	His	Asp	Lys
			20						25					30
Thr	Ile	Thr	Ser	Ala	His	Thr	Ser	Ser	Thr	Ser	Thr	Ser	Leu	Glu
				35					40					45
Ser	Asp	Ser	Ala	Ser	Pro	Gly	Val	Ser	Asp	His	Gly	Arg	Gly	Ser
				50					55					60
Gly	Cys	Ser	Cys	Thr	Ala	Pro	Ala	Leu	Ser	Gly	Pro	Val	Ala	Arg
				65					70					75

Thr	Ile	Tyr	Tyr	Ile	Ala	Ala	Glu	Leu	Val	Arg	Leu	Val	Gly	Ser		80	85	90
Val	Asp	Ser	Met	Lys	Pro	Val	Leu	Gln	Ser	Leu	Tyr	His	Arg	Val		95	100	105
Leu	Leu	Tyr	Pro	Pro	Pro	Gln	His	Arg	Val	Glu	Ala	Ile	Lys	Ile		110	115	120
Met	Lys	Glu	Ile	Leu	Gly	Ser	Pro	Gln	Arg	Leu	Cys	Asp	Leu	Ala		125	130	135
Gly	Pro	Ser	Ser	Thr	Glu	Ser	Glu	Ser	Arg	Lys	Arg	Ser	Ile	Ser		140	145	150
Lys	Arg	Lys	Ser	His	Leu	Asp	Leu	Leu	Lys	Leu	Ile	Met	Asp	Gly		155	160	165
Met	Thr	Glu	Ala	Cys	Ile	Lys	Gly	Gly	Ile	Glu	Ala	Cys	Tyr	Ala		170	175	180
Ala	Val	Ser	Cys	Val	Cys	Thr	Leu	Leu	Gly	Ala	Leu	Asp	Glu	Leu		185	190	195
Ser	Gln	Gly	Lys	Gly	Leu	Ser	Glu	Gly	Gln	Val	Gln	Leu	Leu	Leu		200	205	210
Leu	Arg	Leu	Glu	Glu	Leu	Lys	Asp	Gly	Ala	Glu	Trp	Ser	Arg	Asp		215	220	225
Ser	Met	Glu	Ile	Asn	Glu	Ala	Asp	Phe	Arg	Trp	Gln	Arg	Arg	Val		230	235	240
Leu	Ser	Ser	Glu	His	Thr	Pro	Trp	Glu	Ser	Gly	Asn	Glu	Arg	Ser		245	250	255
Leu	Asp	Ile	Ser	Ile	Ser	Val	Thr	Thr	Asp	Thr	Gly	Gln	Thr	Thr		260	265	270
Leu	Glu	Gly	Glu	Leu	Gly	Gln	Thr	Thr	Pro	Glu	Asp	His	Ser	Gly		275	280	285
Asn	His	Lys	Asn	Ser	Leu	Lys	Ser	Pro	Ala	Ile	Pro	Glu	Gly	Lys		290	295	300
Glu	Thr	Leu	Ser	Lys	Val	Leu	Glu	Thr	Glu	Ala	Val	Asp	Gln	Pro		305	310	315
Asp	Val	Val	Gln	Arg	Ser	His	Thr	Val	Pro	Tyr	Pro	Asp	Ile	Thr		320	325	330
Asn	Phe	Leu	Ser	Val	Asp	Cys	Arg	Thr	Arg	Ser	Tyr	Gly	Ser	Arg		335	340	345
Tyr	Ser	Glu	Ser	Asn	Phe	Ser	Val	Asp	Asp	Gln	Asp	Leu	Ser	Arg		350	355	360
Thr	Glu	Phe	Asp	Ser	Cys	Asp	Gln	Tyr	Ser	Met	Ala	Ala	Glu	Lys				

365	370	375
Asp Ser Gly Arg Ser Asp Val Ser Asp	Ile Gly Ser Asp Asn Cys	
380	385	390
Ser Leu Ala Asp Glu Glu Gln Thr Pro	Arg Asp Cys Leu Gly His	
395	400	405
Arg Ser Leu Arg Thr Ala Ala Leu Ser	Leu Lys Leu Leu Lys Asn	
410	415	420
Gln Glu Ala Asp Gln His Ser Ala Arg	Leu Phe Ile Gln Ser Leu	
425	430	435
Glu Gly Leu Leu Pro Arg Leu Leu Ser	Leu Ser Asn Val Glu Glu	
440	445	450
Val Asp Thr Ala Leu Gln Asn Phe Ala	Ser Thr Phe Cys Ser Gly	
455	460	465
Met Met His Ser Pro Gly Phe Asp Gly	Asn Ser Ser Leu Ser Phe	
470	475	480
Gln Met Leu Met Asn Ala Asp Ser Leu	Tyr Thr Ala Ala His Cys	
485	490	495
Ala Leu Leu Leu Asn Leu Lys Leu Ser	His Gly Asp Tyr Tyr Arg	
500	505	510
Lys Arg Pro Thr Leu Ala Pro Gly Val	Met Lys Asp Phe Met Lys	
515	520	525
Gln Val Gln Thr Ser Gly Val Leu Met	Val Phe Ser Gln Ala Trp	
530	535	540
Ile Glu Glu Leu Tyr His Gln Val Leu	Asp Arg Asn Met Leu Gly	
545	550	555
Glu Ala Gly Tyr Trp Gly Ser Pro Glu	Asp Asn Ser Leu Pro Leu	
560	565	570
Ile Thr Met Leu Thr Asp Ile Asp Gly	Leu Glu Ser Ser Ala Ile	
575	580	585
Gly Gly Gln Leu Met Ala Ser Ala Ala	Thr Glu Ser Pro Phe Ala	
590	595	600
Gln Ser Arg Arg Ile Asp Asp Ser Thr	Val Ala Gly Val Ala Phe	
605	610	615
Ala Arg Tyr Ile Leu Val Gly Cys Trp	Lys Asn Leu Ile Asp Thr	
620	625	630
Leu Ser Thr Pro Leu Thr Gly Arg Met	Ala Gly Ser Ser Lys Gly	
635	640	645
Leu Ala Phe Ile Leu Gly Ala Glu Gly	Ile Lys Glu Gln Asn Gln	
650	655	660

Lys	Glu	Arg	Asp	Ala	Ile	Cys	Met	Ser	Leu	Asp	Gly	Leu	Arg	Lys	665	670	675
Ala	Ala	Arg	Leu	Ser	Cys	Ala	Leu	Gly	Val	Ala	Ala	Asn	Cys	Ala	680	685	690
Ser	Ala	Leu	Ala	Gln	Met	Ala	Ala	Ala	Ser	Cys	Val	Gln	Glu	Glu	695	700	705
Lys	Glu	Glu	Arg	Glu	Ala	Gln	Glu	Pro	Ser	Asp	Ala	Ile	Thr	Gln	710	715	720
Val	Lys	Leu	Lys	Val	Glu	Gln	Lys	Leu	Glu	Gln	Ile	Gly	Lys	Val	725	730	735
Gln	Gly	Val	Trp	Leu	His	Thr	Ala	His	Val	Leu	Cys	Met	Glu	Ala	740	745	750
Ile	Leu	Ser	Val	Gly	Leu	Glu	Met	Gly	Ser	His	Asn	Pro	Asp	Cys	755	760	765
Trp	Pro	His	Val	Phe	Arg	Val	Cys	Glu	Tyr	Val	Gly	Thr	Leu	Glu	770	775	780
His	Asn	His	Phe	Ser	Asp	Gly	Ala	Ser	Gln	Pro	Pro	Leu	Thr	Ile	785	790	795
Ser	Gln	Pro	Gln	Lys	Ala	Thr	Gly	Ser	Ala	Gly	Leu	Leu	Gly	Asp	800	805	810
Pro	Glu	Cys	Glu	Gly	Ser	Pro	Pro	Glu	His	Ser	Pro	Glu	Gln	Gly	815	820	825
Arg	Ser	Leu	Ser	Thr	Ala	Pro	Val	Val	Gln	Pro	Leu	Ser	Ile	Gln	830	835	840
Asp	Leu	Val	Arg	Glu	Gly	Ser	Arg	Gly	Arg	Ala	Ser	Asp	Phe	Arg	845	850	855
Gly	Gly	Ser	Leu	Met	Ser	Gly	Ser	Ser	Ala	Ala	Lys	Val	Val	Leu	860	865	870
Thr	Leu	Ser	Thr	Gln	Ala	Asp	Arg	Leu	Phe	Glu	Asp	Ala	Thr	Asp	875	880	885
Lys	Leu	Asn	Leu	Met	Ala	Leu	Gly	Gly	Phe	Leu	Tyr	Gln	Leu	Lys	890	895	900
Lys	Ala	Ser	Gln	Ser	Gln	Leu	Phe	His	Ser	Val	Thr	Asp	Thr	Val	905	910	915
Asp	Tyr	Ser	Leu	Ala	Met	Pro	Gly	Glu	Val	Lys	Ser	Thr	Gln	Asp	920	925	930
Arg	Lys	Ser	Ala	Leu	His	Leu	Phe	Arg	Leu	Gly	Asn	Ala	Met	Leu	935	940	945
Arg	Ile	Val	Arg	Ser	Lys	Ala	Arg	Pro	Leu	Leu	His	Val	Met	Arg			

950	955	960
Cys Trp Ser Leu Val Ala Pro His Leu Val Glu Ala Ala Cys His		
965	970	975
Lys Glu Arg His Val Ser Gln Lys Ala Val Ser Phe Ile His Asp		
980	985	990
Ile Leu Thr Glu Val Leu Thr Asp Trp Asn Glu Pro Pro His Phe		
995	1000	1005
His Phe Asn Glu Ala Leu Phe Arg Pro Phe Glu Arg Ile Met Gln		
1010	1015	1020
Leu Glu Leu Cys Asp Glu Asp Val Gln Asp Gln Val Val Thr Ser		
1025	1030	1035
Ile Gly Glu Leu Val Glu Val Cys Ser Thr Gln Ile Gln Ser Gly		
1040	1045	1050
Trp Arg Pro Leu Phe Ser Ala Leu Glu Thr Val His Gly Gly Asn		
1055	1060	1065
Lys Ser Glu Met Lys Glu Tyr Leu Val Gly Asp Tyr Ser Met Gly		
1070	1075	1080
Lys Gly Gln Ala Pro Val Phe Asp Val Phe Glu Ala Phe Leu Asn		
1085	1090	1095
Thr Asp Asn Ile Gln Val Phe Ala Asn Ala Ala Thr Ser Tyr Ile		
1100	1105	1110
Met Cys Leu Met Lys Phe Val Lys Gly Leu Gly Glu Val Asp Cys		
1115	1120	1125
Lys Glu Ile Gly Asp Cys Ala Pro Ala Pro Gly Ala Pro Ser Thr		
1130	1135	1140
Asp Leu Cys Leu Pro Ala Leu Asp Tyr Leu Arg Arg Cys Ser Gln		
1145	1150	1155
Leu Leu Ala Lys Ile Tyr Lys Met Pro Leu Lys Pro Ile Phe Leu		
1160	1165	1170
Ser Gly Arg Leu Ala Gly Leu Pro Arg Arg Leu Gln Glu Gln Ser		
1175	1180	1185
Ala Ser Ser Glu Asp Gly Ile Glu Ser Val Leu Ser Asp Phe Asp		
1190	1195	1200
Asp Asp Thr Gly Leu Ile Glu Val Trp Ile Ile Leu Leu Glu Gln		
1205	1210	1215
Leu Thr Ala Ala Val Ser Asn Cys Pro Arg Gln His Gln Pro Pro		
1220	1225	1230
Thr Leu Asp Leu Leu Phe Glu Leu Leu Arg Asp Val Thr Lys Thr		
1235	1240	1245

Pro Gly Pro Gly Phe Gly Ile Tyr Ala Val Val His Leu Leu Leu	1250	1255	1260
Pro Val Met Ser Val Trp Leu Arg Arg Ser His Lys Asp His Ser	1265	1270	1275
Tyr Trp Asp Met Ala Ser Ala Asn Phe Lys His Ala Ile Gly Leu	1280	1285	1290
Ser Cys Glu Leu Val Val Glu His Ile Gln Ser Phe Leu His Ser	1295	1300	1305
Asp Ile Arg Tyr Glu Ser Met Ile Asn Thr Met Leu Lys Asp Leu	1310	1315	1320
Phe Glu Leu Leu Val Ala Cys Val Ala Lys Pro Thr Glu Thr Ile	1325	1330	1335
Ser Arg Val Gly Cys Ser Cys Ile Arg Tyr Val Leu Val Thr Ala	1340	1345	1350
Gly Pro Val Phe Thr Glu Glu Met Trp Arg Leu Ala Cys Cys Ala	1355	1360	1365
Leu Gln Asp Ala Phe Ser Ala Thr Leu Lys Pro Val Lys Asp Leu	1370	1375	1380
Leu Gly Cys Phe His Ser Gly Thr Glu Ser Phe Ser Gly Glu Gly	1385	1390	1395
Cys Gln Val Arg Val Ala Ala Pro Ser Ser Ser Pro Ser Ala Glu	1400	1405	1410
Ala Glu Tyr Trp Arg Ile Arg Ala Met Ala Gln Gln Val Phe Met	1415	1420	1425
Leu Asp Thr Gln Cys Ser Pro Lys Thr Pro Asn Asn Phe Asp His	1430	1435	1440
Ala Gln Ser Cys Gln Leu Ile Ile Glu Leu Pro Pro Asp Glu Lys	1445	1450	1455
Pro Asn Gly His Thr Lys Lys Ser Val Ser Phe Arg Glu Ile Val	1460	1465	1470
Val Ser Leu Leu Ser His Gln Val Leu Leu Gln Asn Leu Tyr Asp	1475	1480	1485
Ile Leu Leu Glu Glu Phe Val Lys Gly Pro Ser Pro Gly Glu Glu	1490	1495	1500
Lys Thr Ile Gln Val Pro Glu Ala Lys Leu Ala Gly Phe Leu Arg	1505	1510	1515
Tyr Ile Ser Met Gln Asn Leu Ala Val Ile Phe Asp Leu Leu Leu	1520	1525	1530
Asp Ser Tyr Arg Thr Ala Arg Glu Phe Asp Thr Ser Pro Gly Leu			



1535	1540	1545
Lys Cys Leu Leu Lys Lys Val Ser Gly Ile Gly Gly Ala Ala Asn		
1550	1555	1560
Leu Tyr Arg Gln Ser Ala Met Ser Phe Asn Ile Tyr Phe His Ala		
1565	1570	1575
Leu Val Cys Ala Val Leu Thr Asn Gln Glu Thr Ile Thr Ala Glu		
1580	1585	1590
Gln Val Lys Lys Val Leu Phe Glu Asp Asp Glu Arg Ser Thr Asp		
1595	1600	1605
Ser Ser Gln Gln Cys Ser Ser Glu Asp Glu Asp Ile Phe Glu Glu		
1610	1615	1620
Thr Ala Gln Val Ser Pro Pro Arg Gly Lys Glu Lys Arg Gln Trp		
1625	1630	1635
Arg Ala Arg Met Pro Leu Leu Ser Val Gln Pro Val Ser Asn Ala		
1640	1645	1650
Asp Trp Val Trp Leu Val Lys Arg Leu His Lys Leu Cys Met Glu		
1655	1660	1665
Leu Cys Asn Asn Tyr Ile Gln Met His Leu Asp Leu Glu Asn Cys		
1670	1675	1680
Met Glu Glu Pro Pro Ile Phe Lys Gly Asp Pro Phe Phe Ile Leu		
1685	1690	1695
Pro Ser Phe Gln Ser Glu Ser Ser Thr Pro Ser Thr Gly Gly Phe		
1700	1705	1710
Ser Gly Lys Glu Thr Pro Ser Glu Asp Asp Arg Ser Gln Ser Arg		
1715	1720	1725
Glu His Met Gly Glu Ser Leu Ser Leu Lys Ala Gly Gly Gly Asp		
1730	1735	1740
Leu Leu Leu Pro Pro Ser Pro Lys Val Glu Lys Lys Asp Pro Ser		
1745	1750	1755
Arg Lys Lys Glu Trp Trp Glu Asn Ala Gly Asn Lys Ile Tyr Thr		
1760	1765	1770
Met Ala Ala Asp Lys Thr Ile Ser Lys Leu Met Thr Glu Tyr Lys		
1775	1780	1785
Lys Arg Lys Gln Gln His Asn Leu Ser Ala Phe Pro Lys Glu Val		
1790	1795	1800
Lys Val Glu Lys Lys Gly Glu Pro Leu Gly Pro Arg Gly Gln Asp		
1805	1810	1815
Ser Pro Leu Leu Gln Arg Pro Gln His Leu Met Asp Gln Gly Gln		
1820	1825	1830

Met Arg His Ser Phe Ser Ala Gly Pro Glu Leu Leu Arg Gln Asp  
1835 1840 1845

Lys Arg Pro Arg Ser Gly Ser Thr Gly Ser Ser Leu Ser Val Ser  
1850 1855 1860

Val Arg Asp Ala Glu Ala Gln Ile Gln Ala Trp Thr Asn Met Val  
1865 1870 1875

Leu Thr Val Leu Asn Gln Ile Gln Ile Leu Pro Asp Gln Thr Phe  
1880 1885 1890

Thr Ala Leu Gln Pro Ala Val Phe Pro Cys Ile Ser Gln Leu Thr  
1895 1900 1905

Cys His Val Thr Asp Ile Arg Val Arg Gln Ala Val Arg Glu Trp  
1910 1915 1920

Leu Gly Arg Val Gly Arg Val Tyr Asp Ile Ile Val  
1925 1930

<210> 125  
<211> 317  
<212> PRT  
<213> Homo sapien

<400> 125  
Met Val Asp Pro Asn Gly Asn Glu Ser Ser Ala Thr Tyr Phe Ile  
1 5 10 15

Leu Ile Gly Leu Pro Gly Leu Glu Glu Ala Gln Phe Trp Leu Ala  
20 25 30

Phe Pro Leu Cys Ser Leu Tyr Leu Ile Ala Val Leu Gly Asn Leu  
35 40 45

Thr Ile Ile Tyr Ile Val Arg Thr Glu His Ser Leu His Glu Pro  
50 55 60

Met Tyr Ile Phe Leu Cys Met Leu Ser Gly Ile Asp Ile Leu Ile  
65 70 75

Ser Thr Ser Ser Met Pro Lys Met Leu Ala Ile Phe Trp Phe Asn  
80 85 90

Ser Thr Thr Ile Gln Phe Asp Ala Cys Leu Leu Gln Ile Phe Ala  
95 100 105

Ile His Ser Leu Ser Gly Met Glu Ser Thr Val Leu Leu Ala Met  
110 115 120

Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg His Ala  
125 130 135

Thr Val Leu Thr Leu Pro Arg Val Thr Lys Ile Gly Val Ala Ala  
140 145 150

Val Val Arg Gly Ala Ala Leu Met Ala Pro Leu Pro Val Phe Ile

	155		160		165
Lys Gln Leu Pro Phe Cys Arg Ser Asn Ile Leu Ser His Ser Tyr	170		175		180
Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Asp Asp Ile Arg	185		190		195
Val Asn Val Val Tyr Gly Leu Ile Val Ile Ile Ser Ala Ile Gly	200		205		210
Leu Asp Ser Leu Leu Ile Ser Phe Ser Tyr Leu Leu Ile Leu Lys	215		220		225
Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys Ala Phe Gly	230		235		240
Thr Cys Val Ser His Val Cys Ala Val Phe Ile Phe Tyr Val Pro	245		250		255
Phe Ile Gly Leu Ser Met Val His Arg Phe Ser Lys Arg Arg Asp	260		265		270
Ser Pro Leu Pro Val Ile Leu Ala Asn Ile Tyr Leu Leu Val Pro	275		280		285
Pro Val Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Glu Ile	290		295		300
Arg Gln Arg Ile Leu Arg Leu Phe His Val Ala Thr His Ala Ser	305		310		315

Glu Pro

<210> 126  
 <211> 530  
 <212> PRT  
 <213> Homo sapien

<400> 126  
 Met Gly Ser Asn Ser Gly Gln Ala Gly Arg His Ile Tyr Lys Ser  
   1                  5                  10                  15  
 Leu Ala Asp Asp Gly Pro Phe Asp Ser Val Glu Pro Pro Lys Arg  
                   20                  25                  30  
 Pro Thr Ser Arg Leu Ile Met His Ser Met Ala Met Phe Gly Arg  
                   35                  40                  45  
 Glu Phe Cys Tyr Ala Val Glu Ala Ala Tyr Val Thr Pro Val Leu  
                   50                  55                  60  
 Leu Ser Val Gly Leu Pro Ser Ser Leu Tyr Ser Ile Val Trp Phe  
                   65                  70                  75  
 Leu Ser Pro Ile Leu Gly Phe Leu Leu Gln Pro Val Val Gly Ser  
                   80                  85                  90

Ala	Ser	Asp	His	Cys	Arg	Ser	Arg	Trp	Gly	Arg	Arg	Arg	Pro	Tyr	95	100	105
Ile	Leu	Thr	Leu	Gly	Val	Met	Met	Leu	Val	Gly	Met	Ala	Leu	Tyr	110	115	120
Leu	Asn	Gly	Ala	Thr	Val	Val	Ala	Ala	Leu	Ile	Ala	Asn	Pro	Arg	125	130	135
Arg	Lys	Leu	Val	Trp	Ala	Ile	Ser	Val	Thr	Met	Ile	Gly	Val	Val	140	145	150
Leu	Phe	Asp	Phe	Ala	Ala	Asp	Phe	Ile	Asp	Gly	Pro	Ile	Lys	Ala	155	160	165
Tyr	Leu	Phe	Asp	Val	Cys	Ser	His	Gln	Asp	Lys	Glu	Lys	Gly	Leu	170	175	180
His	Tyr	His	Ala	Leu	Phe	Thr	Gly	Phe	Gly	Gly	Ala	Leu	Gly	Tyr	185	190	195
Leu	Leu	Gly	Ala	Ile	Asp	Trp	Ala	His	Leu	Glu	Leu	Gly	Arg	Leu	200	205	210
Leu	Gly	Thr	Glu	Phe	Gln	Val	Met	Phe	Phe	Phe	Ser	Ala	Leu	Val	215	220	225
Leu	Thr	Leu	Cys	Phe	Thr	Val	His	Leu	Cys	Ser	Ile	Ser	Glu	Ala	230	235	240
Pro	Leu	Thr	Glu	Val	Ala	Lys	Gly	Ile	Pro	Pro	Gln	Gln	Thr	Pro	245	250	255
Gln	Asp	Pro	Pro	Leu	Ser	Ser	Asp	Gly	Met	Tyr	Glu	Tyr	Gly	Ser	260	265	270
Ile	Glu	Lys	Val	Lys	Asn	Gly	Tyr	Val	Asn	Pro	Glu	Leu	Ala	Met	275	280	285
Gln	Gly	Ala	Lys	Asn	Lys	Asn	His	Ala	Glu	Gln	Thr	Arg	Arg	Ala	290	295	300
Met	Thr	Leu	Lys	Ser	Leu	Leu	Arg	Ala	Leu	Val	Asn	Met	Pro	Pro	305	310	315
His	Tyr	Arg	Tyr	Leu	Cys	Ile	Ser	His	Leu	Ile	Gly	Trp	Thr	Ala	320	325	330
Phe	Leu	Ser	Asn	Met	Leu	Phe	Phe	Thr	Asp	Phe	Met	Gly	Gln	Ile	335	340	345
Val	Tyr	Arg	Gly	Asp	Pro	Tyr	Ser	Ala	His	Asn	Ser	Thr	Glu	Phe	350	355	360
Leu	Ile	Tyr	Glu	Arg	Gly	Val	Glu	Val	Gly	Cys	Trp	Gly	Phe	Cys	365	370	375
Ile	Asn	Ser	Val	Phe	Ser	Ser	Leu	Tyr	Ser	Tyr	Phe	Gln	Lys	Val			

380	385	390
Leu Val Ser Tyr Ile Gly Leu Lys Gly	Leu Tyr Phe Thr Gly Tyr	
395	400	405
Leu Leu Phe Gly Leu Gly Thr Gly Phe	Ile Gly Leu Phe Pro Asn	
410	415	420
Val Tyr Ser Thr Leu Val Leu Cys Ser	Leu Phe Gly Val Met Ser	
425	430	435
Ser Thr Leu Tyr Thr Val Pro Phe Asn	Leu Ile Thr Glu Tyr His	
440	445	450
Arg Glu Glu Glu Lys Glu Arg Gln Gln	Ala Pro Gly Gly Asp Pro	
455	460	465
Asp Asn Ser Val Arg Gly Lys Gly Met	Asp Cys Ala Thr Leu Thr	
470	475	480
Cys Met Val Gln Leu Ala Gln Ile Leu	Val Gly Gly Gly Leu Gly	
485	490	495
Phe Leu Val Asn Thr Ala Gly Thr Val	Val Val Val Val Ile Thr	
500	505	510
Ala Ser Ala Val Ala Leu Ile Gly Cys	Cys Phe Val Ala Leu Phe	
515	520	525
Val Arg Tyr Val Asp		
530		

<210> 127  
 <211> 811  
 <212> PRT  
 <213> Homo sapien

<400> 127

Met Arg Leu Ile Arg Asn Ile Tyr Ile	Phe Cys Ser Ile Val Met
1	15
Thr Ala Glu Gly Asp Ala Pro Glu Leu	Pro Glu Glu Arg Glu Leu
20	30
Met Thr Asn Cys Ser Asn Met Ser Leu	Arg Lys Val Pro Ala Asp
35	45
Leu Thr Pro Ala Thr Thr Thr Leu Asp	Leu Ser Tyr Asn Leu Leu
50	60
Phe Gln Leu Gln Ser Ser Asp Phe His	Ser Val Ser Lys Leu Arg
65	75
Val Leu Ile Leu Cys His Asn Arg Ile	Gln Gln Leu Asp Leu Lys
80	90
Thr Phe Glu Phe Asn Lys Glu Leu Arg	Tyr Leu Asp Leu Ser Asn
95	105

Asn Arg Leu Lys Ser Val Thr Trp Tyr Leu Leu Ala Gly Leu Arg	110	115	120
Tyr Leu Asp Leu Ser Phe Asn Asp Phe Asp Thr Met Pro Ile Cys	125	130	135
Glu Glu Ala Gly Asn Met Ser His Leu Glu Ile Leu Gly Leu Ser	140	145	150
Gly Ala Lys Ile Gln Lys Ser Asp Phe Gln Lys Ile Ala His Leu	155	160	165
His Leu Asn Thr Val Phe Leu Gly Phe Arg Thr Leu Pro His Tyr	170	175	180
Glu Glu Gly Ser Leu Pro Ile Leu Asn Thr Thr Lys Leu His Ile	185	190	195
Val Leu Pro Met Asp Thr Asn Phe Trp Val Leu Leu Arg Asp Gly	200	205	210
Ile Lys Thr Ser Lys Ile Leu Glu Met Thr Asn Ile Asp Gly Lys	215	220	225
Ser Gln Phe Val Ser Tyr Glu Met Gln Arg Asn Leu Ser Leu Glu	230	235	240
Asn Ala Lys Thr Ser Val Leu Leu Leu Asn Lys Val Asp Leu Leu	245	250	255
Trp Asp Asp Leu Phe Leu Ile Leu Gln Phe Val Trp His Thr Ser	260	265	270
Val Glu His Phe Gln Ile Arg Asn Val Thr Phe Gly Gly Lys Ala	275	280	285
Tyr Leu Asp His Asn Ser Phe Asp Tyr Ser Asn Thr Val Met Arg	290	295	300
Thr Ile Lys Leu Glu His Val His Phe Arg Val Phe Tyr Ile Gln	305	310	315
Gln Asp Lys Ile Tyr Leu Leu Leu Thr Lys Met Asp Ile Glu Asn	320	325	330
Leu Thr Ile Ser Asn Ala Gln Met Pro His Met Leu Phe Pro Asn	335	340	345
Tyr Pro Thr Lys Phe Gln Tyr Leu Asn Phe Ala Asn Asn Ile Leu	350	355	360
Thr Asp Glu Leu Phe Lys Arg Thr Ile Gln Leu Pro His Leu Lys	365	370	375
Thr Leu Ile Leu Asn Gly Asn Lys Leu Glu Thr Leu Ser Leu Val	380	385	390
Ser Cys Phe Ala Asn Asn Thr Pro Leu Glu His Leu Asp Leu Ser			

395	400	405
Gln Asn Leu Leu Gln His Lys Asn Asp	Glu Asn Cys Ser Trp Pro	
410	415	420
Glu Thr Val Val Asn Met Asn Leu Ser	Tyr Asn Lys Leu Ser Asp	
425	430	435
Ser Val Phe Arg Cys Leu Pro Lys Ser	Ile Gln Ile Leu Asp Leu	
440	445	450
Asn Asn Asn Gln Ile Gln Thr Val Pro	Lys Glu Thr Ile His Leu	
455	460	465
Met Ala Leu Arg Glu Leu Asn Ile Ala	Phe Asn Phe Leu Thr Asp	
470	475	480
Leu Pro Gly Cys Ser His Phe Ser Arg	Leu Ser Val Leu Asn Ile	
485	490	495
Glu Met Asn Phe Ile Leu Ser Pro Ser	Leu Asp Phe Val Gln Ser	
500	505	510
Cys Gln Glu Val Lys Thr Leu Asn Ala	Gly Arg Asn Pro Phe Arg	
515	520	525
Cys Thr Cys Glu Leu Lys Asn Phe Ile	Gln Leu Glu Thr Tyr Ser	
530	535	540
Glu Val Met Met Val Gly Trp Ser Asp	Ser Tyr Thr Cys Glu Tyr	
545	550	555
Pro Leu Asn Leu Arg Gly Thr Arg Leu	Lys Asp Val His Leu His	
560	565	570
Glu Leu Ser Cys Asn Thr Ala Leu Leu	Ile Val Thr Ile Val Val	
575	580	585
Ile Met Leu Val Leu Gly Leu Ala Val	Ala Phe Cys Cys Leu His	
590	595	600
Phe Asp Leu Pro Trp Tyr Leu Arg Met	Leu Gly Gln Cys Thr Gln	
605	610	615
Thr Trp His Arg Val Arg Lys Thr Thr	Gln Glu Gln Leu Lys Arg	
620	625	630
Asn Val Arg Phe His Ala Phe Ile Ser	Tyr Ser Glu His Asp Ser	
635	640	645
Leu Trp Val Lys Asn Glu Leu Ile Pro	Asn Leu Glu Lys Glu Asp	
650	655	660
Gly Ser Ile Leu Ile Cys Leu Tyr Glu	Ser Tyr Phe Asp Pro Gly	
665	670	675
Lys Ser Ile Ser Glu Asn Ile Val Ser	Phe Ile Glu Lys Ser Tyr	
680	685	690

Lys	Ser	Ile	Phe	Val	Leu	Ser	Pro	Asn	Phe	Val	Gln	Asn	Glu	Trp
				695					700					705
Cys	His	Tyr	Glu	Phe	Tyr	Phe	Ala	His	His	Asn	Leu	Phe	His	Glu
				710					715					720
Asn	Ser	Asp	His	Ile	Ile	Leu	Ile	Leu	Leu	Glu	Pro	Ile	Pro	Phe
				725					730					735
Tyr	Cys	Ile	Pro	Thr	Arg	Tyr	His	Lys	Leu	Lys	Ala	Leu	Leu	Glu
				740					745					750
Lys	Lys	Ala	Tyr	Leu	Glu	Trp	Pro	Lys	Asp	Arg	Arg	Lys	Cys	Gly
				755					760					765
Leu	Phe	Trp	Ala	Asn	Leu	Arg	Ala	Ala	Ile	Asn	Val	Asn	Val	Leu
				770					775					780
Ala	Thr	Arg	Glu	Met	Tyr	Glu	Leu	Gln	Thr	Phe	Thr	Glu	Leu	Asn
				785					790					795
Glu	Glu	Ser	Arg	Gly	Ser	Thr	Ile	Ser	Leu	Met	Arg	Thr	Asp	Cys
				800					805					810

Leu

<210> 128  
 <211> 1382  
 <212> PRT  
 <213> Homo sapien

<400> 128

Met	Thr	Arg	Lys	Arg	Thr	Tyr	Trp	Val	Pro	Asn	Ser	Ser	Gly	Gly
1				5					10					15
Leu	Val	Asn	Arg	Gly	Ile	Asp	Ile	Gly	Asp	Asp	Met	Val	Ser	Gly
				20					25					30
Leu	Ile	Tyr	Lys	Thr	Tyr	Thr	Leu	Gln	Asp	Gly	Pro	Trp	Ser	Gln
				35					40					45
Gln	Glu	Arg	Asn	Pro	Glu	Ala	Pro	Gly	Arg	Ala	Ala	Val	Pro	Pro
				50					55					60
Trp	Gly	Lys	Tyr	Asp	Ala	Ala	Leu	Arg	Thr	Met	Ile	Pro	Phe	Arg
				65					70					75
Pro	Lys	Pro	Arg	Phe	Pro	Ala	Pro	Gln	Pro	Leu	Asp	Asn	Ala	Gly
				80					85					90
Leu	Phe	Ser	Tyr	Leu	Thr	Val	Ser	Trp	Leu	Thr	Pro	Leu	Met	Ile
				95					100					105
Gln	Ser	Leu	Arg	Ser	Arg	Leu	Asp	Glu	Asn	Thr	Ile	Pro	Pro	Leu
				110					115					120
Ser	Val	His	Asp	Ala	Ser	Asp	Lys	Asn	Val	Gln	Arg	Leu	His	Arg



125	130	135
Leu Trp Glu Glu Glu Val Ser Arg Arg Gly Ile Glu Lys Ala Ser		
140	145	150
Val Leu Leu Val Met Leu Arg Phe Gln Arg Thr Arg Leu Ile Phe		
155	160	165
Asp Ala Leu Leu Gly Ile Cys Phe Cys Ile Ala Ser Val Leu Gly		
170	175	180
Pro Ile Leu Ile Ile Pro Lys Ile Leu Glu Tyr Ser Glu Glu Gln		
185	190	195
Leu Gly Asn Val Val His Gly Val Gly Leu Cys Phe Ala Leu Phe		
200	205	210
Leu Ser Glu Cys Val Lys Ser Leu Ser Phe Ser Ser Ser Trp Ile		
215	220	225
Ile Asn Gln Arg Thr Ala Ile Arg Phe Arg Ala Ala Val Ser Ser		
230	235	240
Phe Ala Phe Glu Lys Leu Ile Gln Phe Lys Ser Val Ile His Ile		
245	250	255
Thr Ser Gly Glu Ala Ile Ser Phe Phe Thr Gly Asp Val Asn Tyr		
260	265	270
Leu Phe Glu Gly Val Cys Tyr Gly Pro Leu Val Leu Ile Thr Cys		
275	280	285
Ala Ser Leu Val Ile Cys Ser Ile Ser Ser Tyr Phe Ile Ile Gly		
290	295	300
Tyr Thr Ala Phe Ile Ala Ile Leu Cys Tyr Pro Leu Val Phe Pro		
305	310	315
Leu Glu Val Phe Met Thr Arg Met Ala Val Lys Ala Gln His His		
320	325	330
Thr Ser Glu Val Ser Asp Gln Arg Ile Arg Val Thr Ser Glu Val		
335	340	345
Leu Thr Cys Ile Lys Leu Ile Lys Met Tyr Thr Trp Glu Lys Pro		
350	355	360
Phe Ala Lys Ile Ile Glu Asp Leu Arg Arg Lys Glu Arg Lys Leu		
365	370	375
Leu Glu Lys Cys Gly Leu Val Gln Ser Leu Thr Ser Ile Thr Leu		
380	385	390
Phe Ile Ile Pro Ala Val Ala Thr Ala Val Trp Val Leu Ile His		
395	400	405
Thr Ser Leu Lys Leu Lys Leu Thr Ala Ser Met Ala Phe Ser Met		
410	415	420

Leu	Ala	Ser	Leu	Asn	Leu	Leu	Arg	Leu	Ser	Val	Phe	Phe	Val	Pro	425	430	435
Ile	Ala	Val	Lys	Gly	Leu	Thr	Asn	Ser	Lys	Ser	Ala	Val	Met	Arg	440	445	450
Phe	Lys	Lys	Phe	Phe	Leu	Gln	Glu	Ser	Pro	Val	Phe	Tyr	Val	Gln	455	460	465
Thr	Leu	Gln	Asp	Pro	Ser	Lys	Ala	Leu	Val	Phe	Glu	Glu	Ala	Thr	470	475	480
Leu	Ser	Trp	Gln	Gln	Thr	Cys	Pro	Gly	Ile	Val	Asn	Gly	Ala	Leu	485	490	495
Glu	Leu	Glu	Arg	Asn	Gly	His	Ala	Ser	Glu	Gly	Met	Thr	Arg	Pro	500	505	510
Arg	Asp	Ala	Leu	Gly	Pro	Glu	Glu	Glu	Gly	Asn	Ser	Leu	Gly	Pro	515	520	525
Glu	Leu	His	Lys	Ile	Asn	Leu	Val	Val	Ser	Lys	Gly	Met	Met	Leu	530	535	540
Gly	Val	Cys	Gly	Asn	Thr	Gly	Ser	Gly	Lys	Ser	Ser	Leu	Leu	Ser	545	550	555
Ala	Ile	Leu	Glu	Glu	Met	His	Leu	Leu	Glu	Gly	Ser	Val	Gly	Val	560	565	570
Gln	Gly	Ser	Leu	Ala	Tyr	Val	Pro	Gln	Gln	Ala	Trp	Ile	Val	Ser	575	580	585
Gly	Asn	Ile	Arg	Glu	Asn	Ile	Leu	Met	Gly	Gly	Ala	Tyr	Asp	Lys	590	595	600
Ala	Arg	Tyr	Leu	Gln	Val	Leu	His	Cys	Cys	Ser	Leu	Asn	Arg	Asp	605	610	615
Leu	Glu	Leu	Leu	Pro	Phe	Gly	Asp	Met	Thr	Glu	Ile	Gly	Glu	Arg	620	625	630
Gly	Pro	Asn	Leu	Ser	Gly	Gly	Gln	Lys	Gln	Arg	Ile	Ser	Leu	Ala	635	640	645
Arg	Ala	Val	Tyr	Ser	Asp	Arg	Gln	Ile	Tyr	Leu	Leu	Asp	Asp	Pro	650	655	660
Leu	Ser	Ala	Val	Asp	Ala	His	Val	Gly	Lys	His	Ile	Phe	Glu	Glu	665	670	675
Cys	Ile	Lys	Lys	Thr	Leu	Arg	Gly	Lys	Thr	Val	Val	Gln	Val	Thr	680	685	690
His	Gln	Leu	Gln	Tyr	Leu	Glu	Phe	Cys	Gly	Gln	Val	Ile	Leu	Leu	695	700	705
Glu	Asn	Gly	Lys	Ile	Cys	Glu	Asn	Gly	Thr	His	Ser	Glu	Leu	Met			

710	715	720
Gln Lys Lys Gly Lys Tyr Ala Gln Leu	Ile Gln Lys Met His Lys	
725	730	735
Glu Ala Thr Ser Asp Met Leu Gln Asp	Thr Ala Lys Ile Ala Glu	
740	745	750
Lys Pro Lys Val Glu Ser Gln Ala Leu	Ala Thr Ser Leu Glu Glu	
755	760	765
Ser Leu Asn Gly Asn Ala Val Pro Glu	His Gln Leu Thr Gln Glu	
770	775	780
Glu Glu Met Glu Glu Gly Ser Leu Ser	Trp Arg Val Tyr His His	
785	790	795
Tyr Ile Gln Ala Ala Gly Gly Tyr Met	Val Ser Cys Ile Ile Phe	
800	805	810
Phe Phe Val Val Leu Ile Val Phe Leu	Thr Ile Phe Ser Phe Trp	
815	820	825
Trp Leu Ser Tyr Trp Leu Glu Gln Gly	Ser Gly Thr Asn Ser Ser	
830	835	840
Arg Glu Ser Asn Gly Thr Met Ala Asp	Leu Gly Asn Ile Ala Asp	
845	850	855
Asn Pro Gln Leu Ser Phe Tyr Gln Leu	Val Tyr Gly Leu Asn Ala	
860	865	870
Leu Leu Leu Ile Cys Val Gly Val Cys	Ser Ser Gly Ile Phe Thr	
875	880	885
Lys Val Thr Arg Lys Ala Ser Thr Ala	Leu His Asn Lys Leu Phe	
890	895	900
Asn Lys Val Phe Arg Cys Pro Met Ser	Phe Phe Asp Thr Ile Pro	
905	910	915
Ile Gly Arg Leu Leu Asn Cys Phe Ala	Gly Asp Leu Glu Gln Leu	
920	925	930
Asp Gln Leu Leu Pro Ile Phe Ser Glu	Gln Phe Leu Val Leu Ser	
935	940	945
Leu Met Val Ile Ala Val Leu Leu Ile	Val Ser Val Leu Ser Pro	
950	955	960
Tyr Ile Leu Leu Met Gly Ala Ile Ile	Met Val Ile Cys Phe Ile	
965	970	975
Tyr Tyr Met Met Phe Lys Glu Ala Ile	Gly Val Phe Lys Arg Leu	
980	985	990
Glu Asn Tyr Ser Arg Ser Pro Leu Phe	Ser His Ile Leu Asn Ser	
995	1000	1005

Leu Gln Gly Leu Ser Ser Ile His Val Tyr Gly Lys Thr Glu Asp	1010	1015	1020
Phe Ile Ser Gln Phe Lys Arg Leu Thr Asp Ala Gln Asn Asn Tyr	1025	1030	1035
Leu Leu Leu Phe Leu Ser Ser Thr Arg Trp Met Ala Leu Arg Leu	1040	1045	1050
Glu Ile Met Thr Asn Leu Val Thr Leu Ala Val Ala Leu Phe Val	1055	1060	1065
Ala Phe Gly Ile Ser Ser Thr Pro Tyr Ser Phe Lys Val Met Ala	1070	1075	1080
Val Asn Ile Val Leu Gln Leu Ala Ser Ser Phe Gln Ala Thr Ala	1085	1090	1095
Arg Ile Gly Leu Glu Thr Glu Ala Gln Phe Thr Ala Val Glu Arg	1100	1105	1110
Ile Leu Gln Tyr Met Lys Met Cys Val Ser Glu Ala Pro Leu His	1115	1120	1125
Met Glu Gly Thr Ser Cys Pro Gln Gly Trp Pro Gln His Gly Glu	1130	1135	1140
Ile Ile Phe Gln Asp Tyr His Met Lys Tyr Arg Asp Asn Thr Pro	1145	1150	1155
Thr Val Leu His Gly Ile Asn Leu Thr Ile Arg Gly His Glu Val	1160	1165	1170
Val Gly Ile Val Gly Arg Thr Gly Ser Gly Lys Ser Ser Leu Gly	1175	1180	1185
Met Ala Leu Phe Arg Leu Val Glu Pro Met Ala Gly Arg Ile Leu	1190	1195	1200
Ile Asp Gly Val Asp Ile Cys Ser Ile Gly Leu Glu Asp Leu Arg	1205	1210	1215
Ser Lys Leu Ser Val Ile Pro Gln Asp Pro Val Leu Leu Ser Gly	1220	1225	1230
Thr Ile Arg Phe Asn Leu Asp Pro Phe Asp Arg His Thr Asp Gln	1235	1240	1245
Gln Ile Trp Asp Ala Leu Glu Arg Thr Phe Leu Thr Lys Ala Ile	1250	1255	1260
Ser Lys Phe Pro Lys Lys Leu His Thr Asp Val Val Glu Asn Gly	1265	1270	1275
Gly Asn Phe Ser Val Gly Glu Arg Gln Leu Leu Cys Ile Ala Arg	1280	1285	1290
Ala Val Leu Arg Asn Ser Lys Ile Ile Leu Ile Asp Glu Ala Thr			

1295	1300	1305
Ala Ser Ile Asp Met Glu Thr Asp Thr Leu Ile Gln Arg Thr Ile		
1310	1315	1320
Arg Glu Ala Phe Gln Gly Cys Thr Val Leu Val Ile Ala His Arg		
1325	1330	1335
Val Thr Thr Val Leu Asn Cys Asp Arg Ile Leu Val Met Gly Asn		
1340	1345	1350
Gly Lys Val Val Glu Phe Asp Arg Pro Glu Val Leu Arg Lys Lys		
1355	1360	1365
Pro Gly Ser Leu Phe Ala Ala Leu Met Ala Thr Ala Thr Ser Ser		
1370	1375	1380

Leu Arg

<210> 129

<211> 364

<212> PRT

<213> Homo sapien

<400> 129

Met Ser Val Met Val Val Arg Lys Lys Val Thr Arg Lys Trp Glu		
1	5	10
Lys Leu Pro Gly Arg Asn Thr Phe Cys Cys Asp Gly Arg Val Met		
20	25	30
Met Ala Arg Gln Lys Gly Ile Phe Tyr Leu Thr Leu Phe Leu Ile		
35	40	45
Leu Gly Thr Cys Thr Leu Phe Phe Ala Phe Glu Cys Arg Tyr Leu		
50	55	60
Ala Val Gln Leu Ser Pro Ala Ile Pro Val Phe Ala Ala Met Leu		
65	70	75
Phe Leu Phe Ser Met Ala Thr Leu Leu Arg Thr Ser Phe Ser Asp		
80	85	90
Pro Gly Val Ile Pro Arg Ala Leu Pro Asp Glu Ala Ala Phe Ile		
95	100	105
Glu Met Glu Ile Glu Ala Thr Asn Gly Ala Val Pro Gln Gly Gln		
110	115	120
Arg Pro Pro Pro Arg Ile Lys Asn Phe Gln Ile Asn Asn Gln Ile		
125	130	135
Val Lys Leu Lys Tyr Cys Tyr Thr Cys Lys Ile Phe Arg Pro Pro		
140	145	150
Arg Ala Ser His Cys Ser Ile Cys Asp Asn Cys Val Glu Arg Phe		
155	160	165

Asp	His	His	Cys	Pro	Trp	Val	Gly	Asn	Cys	Val	Gly	Lys	Arg	Asn	
				170					175					180	
Tyr	Arg	Tyr	Phe	Tyr	Leu	Phe	Ile	Leu	Ser	Leu	Ser	Leu	Leu	Thr	
				185					190					195	
Ile	Tyr	Val	Phe	Ala	Phe	Asn	Ile	Val	Tyr	Val	Ala	Leu	Lys	Ser	
				200					205					210	
Leu	Lys	Ile	Gly	Phe	Leu	Glu	Thr	Leu	Lys	Glu	Thr	Pro	Gly	Thr	
				215					220					225	
Val	Leu	Glu	Val	Leu	Ile	Cys	Phe	Phe	Thr	Leu	Trp	Ser	Val	Val	
				230					235					240	
Gly	Leu	Thr	Gly	Phe	His	Thr	Phe	Leu	Val	Ala	Leu	Asn	Gln	Thr	
				245					250					255	
Thr	Asn	Glu	Asp	Ile	Lys	Gly	Ser	Trp	Thr	Gly	Lys	Asn	Arg	Val	
				260					265					270	
Gln	Asn	Pro	Tyr	Ser	His	Gly	Asn	Ile	Val	Lys	Asn	Cys	Cys	Glu	
				275					280					285	
Val	Leu	Cys	Gly	Pro	Leu	Pro	Pro	Ser	Val	Leu	Asp	Arg	Arg	Gly	
				290					295					300	
Ile	Leu	Pro	Leu	Glu	Glu	Ser	Gly	Ser	Arg	Pro	Pro	Ser	Thr	Gln	
				305					310					315	
Glu	Thr	Ser	Ser	Ser	Leu	Leu	Pro	Gln	Ser	Pro	Ala	Pro	Thr	Glu	
				320					325					330	
His	Leu	Asn	Ser	Asn	Glu	Met	Pro	Glu	Asp	Ser	Ser	Thr	Pro	Glu	
				335					340					345	
Glu	Met	Pro	Pro	Pro	Glu	Pro	Pro	Glu	Pro	Pro	Gln	Glu	Ala	Ala	
				350					355					360	

Glu Ala Glu Lys

<210> 130  
 <211> 204  
 <212> PRT  
 <213> Homo sapien

<400> 130  
 Met Val Cys Gly Gly Phe Ala Cys Ser Lys Asn Cys Leu Cys Ala  
   1                  5                  10                  15  
 Leu Asn Leu Leu Tyr Thr Leu Val Ser Leu Leu Leu Ile Gly Ile  
                   20                  25                  30  
 Ala Ala Trp Gly Ile Gly Phe Gly Leu Ile Ser Ser Leu Arg Val  
                   35                  40                  45  
 Val Gly Val Val Ile Ala Val Gly Ile Phe Leu Phe Leu Ile Ala

50	55	60
Leu Val Gly Leu Ile Gly Ala Val Lys His His Gln Val Leu Leu		
65	70	75
Phe Phe Tyr Met Ile Ile Leu Leu Leu Val Phe Ile Val Gln Phe		
80	85	90
Ser Val Ser Cys Ala Cys Leu Ala Leu Asn Gln Glu Gln Gln Gly		
95	100	105
Gln Leu Leu Glu Val Gly Trp Asn Asn Thr Ala Ser Ala Arg Asn		
110	115	120
Asp Ile Gln Arg Asn Leu Asn Cys Cys Gly Phe Arg Ser Val Asn		
125	130	135
Pro Asn Asp Thr Cys Leu Ala Ser Cys Val Lys Ser Asp His Ser		
140	145	150
Cys Ser Pro Cys Ala Pro Ile Ile Gly Glu Tyr Ala Gly Glu Val		
155	160	165
Leu Arg Phe Val Gly Gly Ile Gly Leu Phe Phe Ser Phe Thr Glu		
170	175	180
Ile Leu Gly Val Trp Leu Thr Tyr Arg Tyr Arg Asn Gln Lys Asp		
185	190	195
Pro Arg Ala Asn Pro Ser Ala Phe Leu		
200		

<210> 131  
 <211> 359  
 <212> PRT  
 <213> Homo sapien

<400> 131
Met Lys Leu Gly Cys Val Leu Met Ala Trp Ala Leu Tyr Leu Ser
1 5 10 15
Leu Gly Val Leu Trp Val Ala Gln Met Leu Leu Ala Ala Ser Phe
20 25 30
Glu Thr Leu Gln Cys Glu Gly Pro Val Cys Thr Glu Glu Ser Ser
35 40 45
Cys His Thr Glu Asp Asp Leu Thr Asp Ala Arg Glu Ala Gly Phe
50 55 60
Gln Val Lys Ala Tyr Thr Phe Ser Glu Pro Phe His Leu Ile Val
65 70 75
Ser Tyr Asp Trp Leu Ile Leu Gln Gly Pro Ala Lys Pro Val Phe
80 85 90
Glu Gly Asp Leu Leu Val Leu Arg Cys Gln Ala Trp Gln Asp Trp
95 100 105

Pro	Leu	Thr	Gln	Val	Thr	Phe	Tyr	Arg	Asp	Gly	Ser	Ala	Leu	Gly	110	115	120
Pro	Pro	Gly	Pro	Asn	Arg	Glu	Phe	Ser	Ile	Thr	Val	Val	Gln	Lys	125	130	135
Ala	Asp	Ser	Gly	His	Tyr	His	Cys	Ser	Gly	Ile	Phe	Gln	Ser	Pro	140	145	150
Gly	Pro	Gly	Ile	Pro	Glu	Thr	Ala	Ser	Val	Val	Ala	Ile	Thr	Val	155	160	165
Gln	Glu	Leu	Phe	Pro	Ala	Pro	Ile	Leu	Arg	Ala	Val	Pro	Ser	Ala	170	175	180
Glu	Pro	Gln	Ala	Gly	Ser	Pro	Met	Thr	Leu	Ser	Cys	Gln	Thr	Lys	185	190	195
Leu	Pro	Leu	Gln	Arg	Ser	Ala	Ala	Arg	Leu	Leu	Phe	Ser	Phe	Tyr	200	205	210
Lys	Asp	Gly	Arg	Ile	Val	Gln	Ser	Arg	Gly	Leu	Ser	Ser	Glu	Phe	215	220	225
Gln	Ile	Pro	Thr	Ala	Ser	Glu	Asp	His	Ser	Gly	Ser	Tyr	Trp	Cys	230	235	240
Glu	Ala	Ala	Thr	Glu	Asp	Asn	Gln	Val	Trp	Lys	Gln	Ser	Pro	Gln	245	250	255
Leu	Glu	Ile	Arg	Val	Gln	Gly	Ala	Ser	Ser	Ser	Ala	Ala	Pro	Pro	260	265	270
Thr	Leu	Asn	Pro	Ala	Pro	Gln	Lys	Ser	Ala	Ala	Pro	Gly	Thr	Ala	275	280	285
Pro	Glu	Glu	Ala	Pro	Gly	Pro	Leu	Pro	Pro	Pro	Pro	Thr	Pro	Ser	290	295	300
Ser	Glu	Asp	Pro	Gly	Phe	Ser	Ser	Pro	Leu	Gly	Met	Pro	Asp	Pro	305	310	315
His	Leu	Tyr	His	Gln	Met	Gly	Leu	Leu	Leu	Lys	His	Met	Gln	Asp	320	325	330
Val	Arg	Val	Leu	Leu	Gly	His	Leu	Leu	Met	Glu	Leu	Arg	Glu	Leu	335	340	345
Ser	Gly	His	Gln	Lys	Pro	Gly	Thr	Thr	Lys	Ala	Thr	Ala	Glu		350	355	
<210> 132																	
<211> 420																	
<212> PRT																	
<213> Homo sapien																	
<400> 132																	
Met	Pro	Gly	Gly	Cys	Ser	Arg	Gly	Pro	Ala	Ala	Gly	Asp	Gly	Arg			



1	5	10	15
Leu Arg Leu Ala Arg	Leu Ala Leu Val	Leu Leu Gly Trp Val	Ser
20		25	30
Ser Ser Ser Pro Thr	Ser Ser Ala Ser	Ser Phe Ser Ser Ser	Ala
35		40	45
Pro Phe Leu Ala Ser	Ala Val Ser Ala	Gln Pro Pro Leu Pro	Asp
50		55	60
Gln Cys Pro Ala Leu	Cys Glu Cys Ser	Glu Ala Ala Arg Thr	Val
65		70	75
Lys Cys Val Asn Arg	Asn Leu Thr Glu	Val Pro Thr Asp Leu	Pro
80		85	90
Ala Tyr Val Arg Asn	Leu Phe Leu Thr	Gly Asn Gln Leu Ala	Val
95		100	105
Leu Pro Ala Gly Ala	Phe Ala Arg Arg	Pro Pro Leu Ala Glu	Leu
110		115	120
Ala Ala Leu Asn Leu	Ser Gly Ser Arg	Leu Asp Glu Val Arg	Ala
125		130	135
Gly Ala Phe Glu His	Leu Pro Ser Leu	Arg Gln Leu Asp Leu	Ser
140		145	150
His Asn Pro Leu Ala	Asp Leu Ser Pro	Phe Ala Phe Ser Gly	Ser
155		160	165
Asn Ala Ser Val Ser	Ala Pro Ser Pro	Leu Val Glu Leu Ile	Leu
170		175	180
Asn His Ile Val Pro	Pro Glu Asp Glu	Arg Gln Asn Arg Ser	Phe
185		190	195
Glu Gly Met Val Val	Ala Ala Leu Leu	Ala Gly Arg Ala Leu	Gln
200		205	210
Gly Leu Arg Arg Leu	Glu Leu Ala Ser	Asn His Phe Leu Tyr	Leu
215		220	225
Pro Arg Asp Val Leu	Ala Gln Leu Pro	Ser Leu Arg His Leu	Asp
230		235	240
Leu Ser Asn Asn Ser	Leu Val Ser Leu	Thr Tyr Val Ser Phe	Arg
245		250	255
Asn Leu Thr His Leu	Glu Ser Leu His	Leu Glu Asp Asn Ala	Leu
260		265	270
Lys Val Leu His Asn	Gly Thr Leu Ala	Glu Leu Gln Gly Leu	Pro
275		280	285
His Ile Arg Val Phe	Leu Asp Asn Asn	Pro Trp Val Cys Asp	Cys
290		295	300

His Met Ala Asp Met Val Thr Trp Leu Lys Glu Thr Glu Val Val	305	310	315
Gln Gly Lys Asp Arg Leu Thr Cys Ala Tyr Pro Glu Lys Met Arg	320	325	330
Asn Arg Val Leu Leu Glu Leu Asn Ser Ala Asp Leu Asp Cys Asp	335	340	345
Pro Ile Leu Pro Pro Ser Leu Gln Thr Ser Tyr Val Phe Leu Gly	350	355	360
Ile Val Leu Ala Leu Ile Gly Ala Ile Phe Leu Leu Val Leu Tyr	365	370	375
Leu Asn Arg Lys Gly Ile Lys Lys Trp Met His Asn Ile Arg Asp	380	385	390
Ala Cys Arg Asp His Met Glu Gly Tyr His Tyr Arg Tyr Glu Ile	395	400	405
Asn Ala Asp Pro Arg Leu Thr Asn Leu Ser Ser Asn Ser Asp Val	410	415	420
<210> 133			
<211> 314			
<212> PRT			
<213> Homo sapien			
<400> 133			
Met Ala Pro Pro Gln Val Leu Ala Phe Gly Leu Leu Leu Ala Ala	1	5	10 15
Ala Thr Ala Thr Phe Ala Ala Ala Gln Glu Glu Cys Val Cys Glu	20	25	30
Asn Tyr Lys Leu Ala Val Asn Cys Phe Val Asn Asn Asn Arg Gln	35	40	45
Cys Gln Cys Thr Ser Val Gly Ala Gln Asn Thr Val Ile Cys Ser	50	55	60
Lys Leu Ala Ala Lys Cys Leu Val Met Lys Ala Glu Met Asn Gly	65	70	75
Ser Lys Leu Gly Arg Arg Ala Lys Pro Glu Gly Ala Leu Gln Asn	80	85	90
Asn Asp Gly Leu Tyr Asp Pro Asp Cys Asp Glu Ser Gly Leu Phe	95	100	105
Lys Ala Lys Gln Cys Asn Gly Thr Ser Thr Cys Trp Cys Val Asn	110	115	120
Thr Ala Gly Val Arg Arg Thr Asp Lys Asp Thr Glu Ile Thr Cys	125	130	135
Ser Glu Arg Val Arg Thr Tyr Trp Ile Ile Ile Glu Leu Lys His			

140	145	150
Lys Ala Arg Glu Lys Pro Tyr Asp Ser Lys Ser Leu Arg Thr Ala		
155	160	165
Leu Gln Lys Glu Ile Thr Thr Arg Tyr Gln Leu Asp Pro Lys Phe		
170	175	180
Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val Ile Thr Ile Asp Leu		
185	190	195
Val Gln Asn Ser Ser Gln Lys Thr Gln Asn Asp Val Asp Ile Ala		
200	205	210
Asp Val Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly Glu Ser Leu		
215	220	225
Phe His Ser Lys Lys Met Asp Leu Thr Val Asn Gly Glu Gln Leu		
230	235	240
Asp Leu Asp Pro Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu Lys		
245	250	255
Ala Pro Glu Phe Ser Met Gln Gly Leu Lys Ala Gly Val Ile Ala		
260	265	270
Val Ile Val Val Val Val Ile Ala Val Val Ala Gly Ile Val Val		
275	280	285
Leu Val Ile Ser Arg Lys Lys Arg Met Ala Lys Tyr Glu Lys Ala		
290	295	300
Glu Ile Lys Glu Met Gly Glu Met His Arg Glu Leu Asn Ala		
305	310	

<210> 134  
 <211> 1092  
 <212> PRT  
 <213> Homo sapien

<400> 134  
 Met Pro Cys Gly Phe Ser Pro Ser Pro Val Ala His His Leu Val  
 1 5 10 15  
 Pro Gly Pro Pro Asp Thr Pro Ala Gln Gln Leu Arg Cys Gly Trp  
 20 25 30  
 Thr Val Gly Gly Trp Leu Leu Ser Leu Val Arg Gly Leu Leu Pro  
 35 40 45  
 Cys Leu Pro Pro Gly Ala Arg Thr Ala Glu Gly Pro Ile Met Val  
 50 55 60  
 Leu Ala Gly Pro Leu Ala Val Ser Leu Leu Leu Pro Ser Leu Thr  
 65 70 75  
 Leu Leu Val Ser His Leu Ser Ser Ser Gln Asp Val Ser Ser Glu  
 80 85 90

Pro	Ser	Ser	Glu	Gln	Gln	Leu	Cys	Ala	Leu	Ser	Lys	His	Pro	Thr	95	100	105
Val	Ala	Phe	Glu	Asp	Leu	Gln	Pro	Trp	Val	Ser	Asn	Phe	Thr	Tyr	110	115	120
Pro	Gly	Ala	Arg	Asp	Phe	Ser	Gln	Leu	Ala	Leu	Asp	Pro	Ser	Gly	125	130	135
Asn	Gln	Leu	Ile	Val	Gly	Ala	Arg	Asn	Tyr	Leu	Phe	Arg	Leu	Ser	140	145	150
Leu	Ala	Asn	Val	Ser	Leu	Leu	Gln	Ala	Thr	Glu	Trp	Ala	Ser	Ser	155	160	165
Glu	Asp	Thr	Arg	Arg	Ser	Cys	Gln	Ser	Lys	Gly	Lys	Thr	Glu	Glu	170	175	180
Glu	Cys	Gln	Asn	Tyr	Val	Arg	Val	Leu	Ile	Val	Ala	Gly	Arg	Lys	185	190	195
Val	Phe	Met	Cys	Gly	Thr	Asn	Ala	Phe	Ser	Pro	Met	Cys	Thr	Ser	200	205	210
Arg	Gln	Val	Gly	Asn	Leu	Ser	Arg	Thr	Ile	Glu	Lys	Ile	Asn	Gly	215	220	225
Val	Ala	Arg	Cys	Pro	Tyr	Asp	Pro	Arg	His	Asn	Ser	Thr	Ala	Val	230	235	240
Ile	Ser	Ser	Gln	Gly	Glu	Leu	Tyr	Ala	Ala	Thr	Val	Ile	Asp	Phe	245	250	255
Ser	Gly	Arg	Asp	Pro	Ala	Ile	Tyr	Arg	Ser	Leu	Gly	Ser	Gly	Pro	260	265	270
Pro	Leu	Arg	Thr	Ala	Gln	Tyr	Asn	Ser	Lys	Trp	Leu	Asn	Glu	Pro	275	280	285
Asn	Phe	Val	Ala	Ala	Tyr	Asp	Ile	Gly	Leu	Phe	Ala	Tyr	Phe	Phe	290	295	300
Leu	Arg	Glu	Asn	Ala	Val	Glu	His	Asp	Cys	Gly	Arg	Thr	Val	Tyr	305	310	315
Ser	Arg	Val	Ala	Arg	Val	Cys	Lys	Asn	Asp	Val	Gly	Gly	Arg	Phe	320	325	330
Leu	Leu	Glu	Asp	Thr	Trp	Thr	Thr	Phe	Met	Lys	Ala	Arg	Leu	Asn	335	340	345
Cys	Ser	Arg	Pro	Gly	Glu	Val	Pro	Phe	Tyr	Tyr	Asn	Glu	Leu	Gln	350	355	360
Ser	Ala	Phe	His	Leu	Pro	Glu	Gln	Asp	Leu	Ile	Tyr	Gly	Val	Phe	365	370	375
Thr	Thr	Asn	Val	Asn	Ser	Ile	Ala	Ala	Ser	Ala	Val	Cys	Ala	Phe			

380	385	390
Asn Leu Ser Ala Ile Ser Gln Ala Phe	Asn Gly Pro Phe Arg Tyr	
395	400	405
Gln Glu Asn Pro Arg Ala Ala Trp Leu	Pro Ile Ala Asn Pro Ile	
410	415	420
Pro Asn Phe Gln Cys Gly Thr Leu Pro	Glu Thr Gly Pro Asn Glu	
425	430	435
Asn Leu Thr Glu Arg Ser Leu Gln Asp	Ala Gln Arg Leu Phe Leu	
440	445	450
Met Ser Glu Ala Val Gln Pro Val Thr	Pro Glu Pro Cys Val Thr	
455	460	465
Gln Asp Ser Val Arg Phe Ser His Leu	Val Val Asp Leu Val Gln	
470	475	480
Ala Lys Asp Thr Leu Tyr His Val Leu	Tyr Ile Gly Thr Glu Ser	
485	490	495
Gly Thr Ile Leu Lys Ala Leu Ser Thr	Ala Ser Arg Ser Leu His	
500	505	510
Gly Cys Tyr Leu Glu Glu Leu His Val	Leu Pro Pro Gly Arg Arg	
515	520	525
Glu Pro Leu Arg Ser Leu Arg Ile Leu	His Ser Ala Arg Ala Leu	
530	535	540
Phe Val Gly Leu Arg Asp Gly Val Leu	Arg Val Pro Leu Glu Arg	
545	550	555
Cys Ala Ala Tyr Arg Ser Gln Gly Ala	Cys Leu Gly Ala Arg Asp	
560	565	570
Pro Tyr Cys Gly Trp Asp Gly Lys Gln	Gln Arg Cys Ser Thr Leu	
575	580	585
Glu Asp Ser Ser Asn Met Ser Leu Trp	Thr Gln Asn Ile Thr Ala	
590	595	600
Cys Pro Val Arg Asn Val Thr Arg Asp	Gly Gly Phe Gly Pro Trp	
605	610	615
Ser Pro Trp Gln Pro Cys Glu His Leu	Asp Gly Asp Asn Ser Gly	
620	625	630
Ser Cys Leu Cys Arg Ala Arg Ser Cys	Asp Ser Pro Arg Pro Arg	
635	640	645
Cys Gly Gly Leu Asp Cys Leu Gly Pro	Ala Ile His Ile Ala Asn	
650	655	660
Cys Ser Arg Asn Gly Ala Trp Thr Pro	Trp Ser Ser Trp Ala Leu	
665	670	675

Cys Ser Thr Ser	Cys Gly Ile Gly Phe	Gln Val Arg Gln Arg	Ser
680		685	690
Cys Ser Asn Pro	Ala Pro Arg His Gly	Gly Arg Ile Phe Val	Gly
695		700	705
Lys Ser Arg Glu	Glu Arg Phe Cys Asn	Glu Asn Thr Pro Cys	Pro
710		715	720
Val Pro Ile Phe	Trp Ala Ser Trp Gly	Ser Trp Ser Lys Cys	Ser
725		730	735
Ser Asn Cys Gly	Gly Gly Met Gln Ser	Arg Arg Arg Ala Cys	Glu
740		745	750
Asn Gly Asn Ser	Cys Leu Gly Cys Gly	Glu Phe Lys Thr Cys	Asn
755		760	765
Pro Glu Gly Cys	Pro Glu Val Arg Arg	Asn Thr Pro Trp Thr	Pro
770		775	780
Trp Leu Pro Val	Asn Val Thr Gln Gly	Gly Ala Arg Gln Glu	Gln
785		790	795
Arg Phe Arg Phe	Thr Cys Arg Ala Pro	Leu Ala Asp Pro His	Gly
800		805	810
Leu Gln Phe Gly	Arg Arg Arg Thr Glu	Thr Arg Thr Cys Pro	Ala
815		820	825
Asp Gly Ser Gly	Ser Cys Asp Thr Asp	Ala Leu Val Glu Val	Leu
830		835	840
Leu Arg Ser Gly	Ser Thr Ser Pro His	Thr Val Ser Gly Gly	Trp
845		850	855
Ala Ala Trp Gly	Pro Trp Ser Ser Cys	Ser Arg Asp Cys Glu	Leu
860		865	870
Gly Phe Arg Val	Arg Lys Arg Thr Cys	Thr Asn Pro Glu Pro	Arg
875		880	885
Asn Gly Gly Leu	Pro Cys Val Gly Asp	Ala Ala Glu Tyr Gln	Asp
890		895	900
Cys Asn Pro Gln	Ala Cys Pro Val Arg	Gly Ala Trp Ser Cys	Trp
905		910	915
Thr Ser Trp Ser	Pro Cys Ser Ala Ser	Cys Gly Gly Gly His	Tyr
920		925	930
Gln Arg Thr Arg	Ser Cys Thr Ser Pro	Ala Pro Ser Pro Gly	Glu
935		940	945
Asp Ile Cys Leu	Gly Leu His Thr Glu	Glu Ala Leu Cys Ala	Thr
950		955	960
Gln Ala Cys Pro	Gly Trp Ser Pro Trp	Ser Glu Trp Ser Lys	Cys

965	970	975
Thr Asp Asp Gly Ala Gln Ser Arg Ser Arg	His Cys Glu Glu Leu	
980	985	990
Leu Pro Gly Ser Ser Ala Cys Ala Gly Asn Ser Ser Gln Ser Arg		
995	1000	1005
Pro Cys Pro Tyr Ser Glu Ile Pro Val Ile Leu Pro Ala Ser Ser		
1010	1015	1020
Met Glu Glu Ala Thr Asp Cys Ala Gly Lys Arg Asn Arg Thr Tyr		
1025	1030	1035
Leu Met Leu Arg Ser Ser Gln Pro Ser Ser Thr Pro Leu Gln Ser		
1040	1045	1050
Leu Asp Ser Phe His Ile Leu Leu Gln Thr Ala Lys Leu Cys Trp		
1055	1060	1065
Gly Pro His Cys Phe Glu Met Gly Ser Ile Ser Ser Thr Trp Trp		
1070	1075	1080
Pro Arg Ala Ser Pro Ala Ser Trp Ala Leu Gly Ser		
1085	1090	
<210> 135		
<211> 260		
<212> PRT		
<213> Homo sapien		
<400> 135		
Met Ala Lys Asp Asn Ser Thr Val Arg Cys Phe Gln Gly Leu Leu		
1	5	10
Ile Phe Gly Asn Val Ile Ile Gly Cys Cys Gly Ile Ala Leu Thr		
20	25	30
Ala Glu Cys Ile Phe Phe Val Ser Asp Gln His Ser Leu Tyr Pro		
35	40	45
Leu Leu Glu Ala Thr Asp Asn Asp Asp Ile Tyr Gly Ala Ala Trp		
50	55	60
Ile Gly Ile Phe Val Gly Ile Cys Leu Phe Cys Leu Ser Val Leu		
65	70	75
Gly Ile Val Gly Ile Met Lys Ser Ser Arg Lys Ile Leu Leu Ala		
80	85	90
Tyr Phe Ile Leu Met Phe Ile Val Tyr Ala Phe Glu Val Ala Ser		
95	100	105
Cys Ile Thr Ala Ala Thr Gln Gln Asp Phe Phe Thr Pro Asn Leu		
110	115	120
Phe Leu Lys Gln Met Leu Glu Arg Tyr Gln Asn Asn Ser Pro Pro		
125	130	135

Asn	Asn	Asp	Asp	Gln	Trp	Lys	Asn	Asn	Gly	Val	Thr	Lys	Thr	Trp
				140					145					150
Asp	Arg	Leu	Met	Leu	Gln	Asp	Asn	Cys	Cys	Gly	Val	Asn	Gly	Pro
				155					160					165
Ser	Asp	Trp	Gln	Lys	Tyr	Thr	Ser	Ala	Phe	Arg	Thr	Glu	Asn	Asn
				170					175					180
Asp	Ala	Asp	Tyr	Pro	Trp	Pro	Arg	Gln	Cys	Cys	Val	Met	Asn	Asn
				185					190					195
Leu	Lys	Glu	Pro	Leu	Asn	Leu	Glu	Ala	Cys	Lys	Leu	Gly	Val	Pro
				200					205					210
Gly	Phe	Tyr	His	Asn	Gln	Gly	Cys	Tyr	Glu	Leu	Ile	Ser	Gly	Pro
				215					220					225
Met	Asn	Arg	His	Ala	Trp	Gly	Val	Ala	Trp	Phe	Gly	Phe	Ala	Ile
				230					235					240
Leu	Cys	Trp	Thr	Phe	Trp	Val	Leu	Leu	Gly	Thr	Met	Phe	Tyr	Trp
				245					250					255
Ser	Arg	Ile	Glu	Tyr										
				260										

<210> 136  
 <211> 289  
 <212> PRT  
 <213> Homo sapien

<400> 136

Met	Phe	Asp	Lys	Thr	Arg	Leu	Pro	Tyr	Val	Ala	Leu	Asp	Val	Leu
1				5					10					15
Cys	Val	Leu	Leu	Ala	Gly	Leu	Pro	Phe	Ala	Ile	Phe	Thr	Ser	Arg
				20					25					30
His	Ile	Thr	Ser	Arg	His	Thr	Pro	Phe	Gln	Arg	Gly	Val	Phe	Cys
				35					40					45
Asn	Asp	Glu	Ser	Ile	Lys	Tyr	Pro	Tyr	Lys	Glu	Asp	Thr	Ile	Pro
				50					55					60
Tyr	Ala	Leu	Leu	Gly	Gly	Ile	Ile	Ile	Pro	Phe	Ser	Ile	Ile	Val
				65					70					75
Ile	Ile	Leu	Gly	Glu	Thr	Leu	Ser	Val	Tyr	Cys	Asn	Leu	Leu	His
				80					85					90
Ser	Asn	Ser	Phe	Ile	Arg	Asn	Asn	Tyr	Ile	Ala	Thr	Ile	Tyr	Lys
				95					100					105
Ala	Ile	Gly	Thr	Phe	Leu	Phe	Gly	Ala	Ala	Ala	Ser	Gln	Ser	Leu
				110					115					120
Thr	Asp	Ile	Ala	Lys	Tyr	Ser	Ile	Gly	Arg	Leu	Arg	Pro	His	Phe



	125		130		135
Leu Asp Val Cys Asp Pro Asp Trp Ser Lys Ile Asn Cys Ser Asp	140		145		150
Gly Tyr Ile Glu Tyr Tyr Ile Cys Arg Gly Asn Ala Glu Arg Val	155		160		165
Lys Glu Gly Arg Leu Ser Phe Tyr Ser Gly His Ser Ser Phe Ser	170		175		180
Met Tyr Cys Met Leu Phe Val Ala Leu Tyr Leu Gln Ala Arg Met	185		190		195
Lys Gly Asp Trp Ala Arg Leu Leu Arg Pro Thr Leu Gln Phe Gly	200		205		210
Leu Val Ala Val Ser Ile Tyr Val Gly Leu Ser Arg Val Ser Asp	215		220		225
Tyr Lys His His Trp Ser Asp Val Leu Thr Gly Leu Ile Gln Gly	230		235		240
Ala Leu Val Ala Ile Leu Val Ala Val Tyr Val Ser Asp Phe Phe	245		250		255
Lys Glu Arg Thr Ser Phe Lys Glu Arg Lys Glu Glu Asp Ser His	260		265		270
Thr Thr Leu His Glu Thr Pro Thr Thr Gly Asn His Tyr Pro Ser	275		280		285

Asn His Gln Pro

<210> 137  
 <211> 734  
 <212> PRT  
 <213> Homo sapien

<400> 137  
 Met Leu Leu Trp Leu Leu Leu Leu Ile Leu Thr Pro Gly Arg Glu  
 1 5 10 15  
 Gln Ser Gly Val Ala Pro Lys Ala Val Leu Leu Leu Asn Pro Pro  
 20 25 30  
 Trp Ser Thr Ala Phe Lys Gly Glu Lys Val Ala Leu Ile Cys Ser  
 35 40 45  
 Ser Ile Ser His Ser Leu Ala Gln Gly Asp Thr Tyr Trp Tyr His  
 50 55 60  
 Asp Glu Lys Leu Leu Lys Ile Lys His Asp Lys Ile Gln Ile Thr  
 65 70 75  
 Glu Pro Gly Asn Tyr Gln Cys Lys Thr Arg Gly Ser Ser Leu Ser  
 80 85 90

Asp	Ala	Val	His	Val	Glu	Phe	Ser	Pro	Asp	Trp	Leu	Ile	Leu	Gln	95	100	105
Ala	Leu	His	Pro	Val	Phe	Glu	Gly	Asp	Asn	Val	Ile	Leu	Arg	Cys	110	115	120
Gln	Gly	Lys	Asp	Asn	Lys	Asn	Thr	His	Gln	Lys	Val	Tyr	Tyr	Lys	125	130	135
Asp	Gly	Lys	Gln	Leu	Pro	Asn	Ser	Tyr	Asn	Leu	Glu	Lys	Ile	Thr	140	145	150
Val	Asn	Ser	Val	Ser	Arg	Asp	Asn	Ser	Lys	Tyr	His	Cys	Thr	Ala	155	160	165
Tyr	Arg	Lys	Phe	Tyr	Ile	Leu	Asp	Ile	Glu	Val	Thr	Ser	Lys	Pro	170	175	180
Leu	Asn	Ile	Gln	Val	Gln	Glu	Leu	Phe	Leu	His	Pro	Val	Leu	Arg	185	190	195
Ala	Ser	Ser	Ser	Thr	Pro	Ile	Glu	Gly	Ser	Pro	Met	Thr	Leu	Thr	200	205	210
Cys	Glu	Thr	Gln	Leu	Ser	Pro	Gln	Arg	Pro	Asp	Val	Gln	Leu	Gln	215	220	225
Phe	Ser	Leu	Phe	Arg	Asp	Ser	Gln	Thr	Leu	Gly	Leu	Gly	Trp	Ser	230	235	240
Arg	Ser	Pro	Arg	Leu	Gln	Ile	Pro	Ala	Met	Trp	Thr	Glu	Asp	Ser	245	250	255
Gly	Ser	Tyr	Trp	Cys	Glu	Val	Glu	Thr	Val	Thr	His	Ser	Ile	Lys	260	265	270
Lys	Arg	Ser	Leu	Arg	Ser	Gln	Ile	Arg	Val	Gln	Arg	Val	Pro	Val	275	280	285
Ser	Asn	Val	Asn	Leu	Glu	Ile	Arg	Pro	Thr	Gly	Gly	Gln	Leu	Ile	290	295	300
Glu	Gly	Glu	Asn	Met	Val	Leu	Ile	Cys	Ser	Val	Ala	Gln	Gly	Ser	305	310	315
Gly	Thr	Val	Thr	Phe	Ser	Trp	His	Lys	Glu	Gly	Arg	Val	Arg	Ser	320	325	330
Leu	Gly	Arg	Lys	Thr	Gln	Arg	Ser	Leu	Leu	Ala	Glu	Leu	His	Val	335	340	345
Leu	Thr	Val	Lys	Glu	Ser	Asp	Ala	Gly	Arg	Tyr	Tyr	Cys	Ala	Ala	350	355	360
Asp	Asn	Val	His	Ser	Pro	Ile	Leu	Ser	Thr	Trp	Ile	Arg	Val	Thr	365	370	375
Val	Arg	Ile	Pro	Val	Ser	His	Pro	Val	Leu	Thr	Phe	Arg	Ala	Pro			

380	385	390
Arg Ala His Thr Val Val Gly Asp Leu	Leu Glu Leu His Cys Glu	
395	400	405
Ser Leu Arg Gly Ser Pro Pro Ile Leu	Tyr Arg Phe Tyr His Glu	
410	415	420
Asp Val Thr Leu Gly Asn Ser Ser Ala	Pro Ser Gly Gly Gly Ala	
425	430	435
Ser Phe Asn Leu Ser Leu Thr Ala Glu	His Ser Gly Asn Tyr Ser	
440	445	450
Cys Asp Ala Asp Asn Gly Leu Gly Ala	Gln His Ser His Gly Val	
455	460	465
Ser Leu Arg Val Thr Val Pro Val Ser	Arg Pro Val Leu Thr Leu	
470	475	480
Arg Ala Pro Gly Ala Gln Ala Val Val	Gly Asp Leu Leu Glu Leu	
485	490	495
His Cys Glu Ser Leu Arg Gly Ser Phe	Pro Ile Leu Tyr Trp Phe	
500	505	510
Tyr His Glu Asp Asp Thr Leu Gly Asn	Ile Ser Ala His Ser Gly	
515	520	525
Gly Gly Ala Ser Phe Asn Leu Ser Leu	Thr Thr Glu His Ser Gly	
530	535	540
Asn Tyr Ser Cys Glu Ala Asp Asn Gly	Leu Gly Ala Gln His Ser	
545	550	555
Lys Val Val Thr Leu Asn Val Thr Gly	Thr Ser Arg Asn Arg Thr	
560	565	570
Gly Leu Thr Ala Ala Gly Ile Thr Gly	Leu Val Leu Ser Ile Leu	
575	580	585
Val Leu Ala Ala Ala Ala Ala Leu Leu	His Tyr Ala Arg Ala Arg	
590	595	600
Arg Lys Pro Gly Gly Leu Ser Ala Thr	Gly Thr Ser Ser His Ser	
605	610	615
Pro Ser Glu Cys Gln Glu Pro Ser Ser	Ser Arg Pro Ser Arg Ile	
620	625	630
Asp Pro Gln Glu Pro Thr His Ser Lys	Pro Leu Ala Pro Met Glu	
635	640	645
Leu Glu Pro Met Tyr Ser Asn Val Asn	Pro Gly Asp Ser Asn Pro	
650	655	660
Ile Tyr Ser Gln Ile Trp Ser Ile Gln	His Thr Lys Glu Asn Ser	
665	670	675

Ala	Asn	Cys	Pro	Met	Met	His	Gln	Glu	His	Glu	Glu	Leu	Thr	Val
				680					685					690
Leu	Tyr	Ser	Glu	Leu	Lys	Lys	Thr	His	Pro	Asp	Asp	Ser	Ala	Gly
				695					700					705
Glu	Ala	Ser	Ser	Arg	Gly	Arg	Ala	His	Glu	Glu	Asp	Asp	Glu	Glu
				710					715					720
Asn	Tyr	Glu	Asn	Val	Pro	Arg	Val	Leu	Leu	Ala	Ser	Asp	His	
				725					730					

<210> 138  
 <211> 251  
 <212> PRT  
 <213> Homo sapien

<400> 138  
 Met Glu Gly Gly Ala Ala Ala Ala Thr Pro Thr Ala Leu Pro Tyr  
 1 5 10 15  
 Tyr Val Ala Phe Ser Gln Leu Leu Gly Leu Thr Leu Val Ala Met  
 20 25 30  
 Thr Gly Ala Trp Leu Gly Leu Tyr Arg Gly Gly Ile Ala Trp Glu  
 35 40 45  
 Ser Asp Leu Gln Phe Asn Ala His Pro Leu Cys Met Val Ile Gly  
 50 55 60  
 Leu Ile Phe Leu Gln Gly Asn Ala Leu Leu Val Tyr Arg Val Phe  
 65 70 75  
 Arg Asn Glu Ala Lys Arg Thr Thr Lys Val Leu His Gly Leu Leu  
 80 85 90  
 His Ile Phe Ala Leu Val Ile Ala Leu Val Gly Leu Val Ala Val  
 95 100 105  
 Phe Asp Tyr His Arg Lys Lys Gly Tyr Ala Asp Leu Tyr Ser Leu  
 110 115 120  
 His Ser Trp Cys Gly Ile Leu Val Phe Val Leu Tyr Phe Val Gln  
 125 130 135  
 Trp Leu Val Gly Phe Ser Phe Phe Leu Phe Pro Gly Ala Ser Phe  
 140 145 150  
 Ser Leu Arg Ser Arg Tyr Arg Pro Gln His Ile Phe Phe Gly Ala  
 155 160 165  
 Thr Ile Phe Leu Leu Pro Val Gly Thr Ala Leu Leu Gly Leu Lys  
 170 175 180  
 Glu Ala Leu Leu Phe Asn Leu Gly Gly Lys Tyr Ser Ala Phe Glu  
 185 190 195  
 Pro Glu Gly Val Leu Ala Asn Val Leu Gly Leu Leu Leu Ala Cys

200	205	210
Phe Gly Gly Ala Val Leu Tyr Ile Leu Thr Arg Ala Asp Trp Lys		
215	220	225
Arg Pro Ser Gln Ala Glu Glu Gln Ala Leu Ser Met Asp Phe Lys		
230	235	240
Thr Leu Arg Gln Gly Asp Ser Pro Gly Ser Gln		
245	250	
<210> 139		
<211> 391		
<212> PRT		
<213> Homo sapien		
<400> 139		
Met Arg Gln Leu Cys Arg Gly Arg Val Leu Gly Ile Ser Val Ala		
1	5	10
Ile Ala His Gly Val Phe Ser Gly Ser Leu Asn Ile Leu Leu Lys		
20	25	30
Phe Leu Ile Ser Arg Tyr Gln Phe Ser Phe Leu Thr Leu Val Gln		
35	40	45
Cys Leu Thr Ser Ser Thr Ala Ala Leu Ser Leu Glu Leu Leu Arg		
50	55	60
Arg Leu Gly Leu Ile Ala Val Pro Pro Phe Gly Leu Ser Leu Ala		
65	70	75
Arg Ser Phe Ala Gly Val Ala Val Leu Ser Thr Leu Gln Ser Ser		
80	85	90
Leu Thr Leu Trp Ser Leu Arg Gly Leu Ser Leu Pro Met Tyr Val		
95	100	105
Val Phe Lys Arg Cys Leu Pro Leu Val Thr Met Leu Ile Gly Val		
110	115	120
Leu Val Leu Lys Asn Gly Ala Pro Ser Pro Gly Val Leu Ala Ala		
125	130	135
Val Leu Ile Thr Thr Cys Gly Ala Ala Leu Ala Gly Ala Gly Asp		
140	145	150
Leu Thr Gly Asp Pro Ile Gly Tyr Val Thr Gly Val Leu Ala Val		
155	160	165
Leu Val His Ala Ala Tyr Leu Val Leu Ile Gln Lys Ala Ser Ala		
170	175	180
Asp Thr Glu His Gly Pro Leu Thr Ala Gln Tyr Val Ile Ala Val		
185	190	195
Ser Ala Thr Pro Leu Leu Val Ile Cys Ser Phe Ala Ser Thr Asp		
200	205	210

Ser	Ile	His	Ala	Trp	Thr	Phe	Pro	Gly	Trp	Lys	Asp	Pro	Ala	Met	215	220	225
Val	Cys	Ile	Phe	Val	Ala	Cys	Ile	Leu	Ile	Gly	Cys	Ala	Met	Asn	230	235	240
Phe	Thr	Thr	Leu	His	Cys	Thr	Tyr	Ile	Asn	Ser	Ala	Val	Thr	Thr	245	250	255
Ser	Leu	Phe	Ile	Ala	Gly	Val	Val	Val	Asn	Thr	Leu	Gly	Ser	Ile	260	265	270
Ile	Tyr	Cys	Val	Ala	Lys	Phe	Met	Glu	Thr	Arg	Lys	Gln	Ser	Asn	275	280	285
Tyr	Glu	Asp	Leu	Glu	Ala	Gln	Pro	Arg	Gly	Glu	Glu	Ala	Gln	Leu	290	295	300
Ser	Gly	Asp	Gln	Leu	Pro	Phe	Val	Met	Glu	Glu	Leu	Pro	Gly	Glu	305	310	315
Gly	Gly	Asn	Gly	Arg	Ser	Glu	Gly	Gly	Glu	Ala	Ala	Gly	Gly	Pro	320	325	330
Ala	Gln	Glu	Ser	Arg	Gln	Glu	Val	Arg	Gly	Ser	Pro	Arg	Gly	Val	335	340	345
Pro	Leu	Val	Ala	Gly	Ser	Ser	Glu	Glu	Gly	Ser	Arg	Arg	Ser	Leu	350	355	360
Lys	Asp	Ala	Tyr	Leu	Glu	Val	Trp	Arg	Leu	Val	Arg	Gly	Thr	Arg	365	370	375
Tyr	Met	Lys	Lys	Asp	Tyr	Leu	Ile	Glu	Asn	Glu	Glu	Leu	Pro	Ser	380	385	390

Pro

<210> 140  
 <211> 229  
 <212> PRT  
 <213> Homo sapien

<400> 140

Met	Ala	Arg	Leu	Ala	Leu	Ser	Pro	Val	Pro	Ser	His	Trp	Met	Val	1	5	10	15
Ala	Leu	Leu	Leu	Leu	Leu	Ser	Ala	Glu	Pro	Val	Pro	Ala	Ala	Arg	20	25	30	
Ser	Glu	Asp	Arg	Tyr	Arg	Asn	Pro	Lys	Gly	Ser	Ala	Cys	Ser	Arg	35	40	45	
Ile	Trp	Gln	Ser	Pro	Arg	Phe	Ile	Ala	Arg	Lys	Arg	Gly	Phe	Thr	50	55	60	
Val	Lys	Met	His	Cys	Tyr	Met	Asn	Ser	Ala	Ser	Gly	Asn	Val	Ser				

	65		70		75
Trp Leu Trp Lys Gln Glu Met Asp Glu Asn Pro Gln Gln Leu Lys	80		85		90
Leu Glu Lys Gly Arg Met Glu Glu Ser Gln Asn Glu Ser Leu Ala	95		100		105
Thr Leu Thr Ile Gln Gly Ile Arg Phe Glu Asp Asn Gly Ile Tyr	110		115		120
Phe Cys Gln Gln Lys Cys Asn Asn Thr Ser Glu Val Tyr Gln Gly	125		130		135
Cys Gly Thr Glu Leu Arg Val Met Gly Phe Ser Thr Leu Ala Gln	140		145		150
Leu Lys Gln Arg Asn Thr Leu Lys Asp Gly Ile Ile Met Ile Gln	155		160		165
Thr Leu Leu Ile Ile Leu Phe Ile Ile Val Pro Ile Phe Leu Leu	170		175		180
Leu Asp Lys Asp Asp Ser Lys Ala Gly Met Glu Glu Asp His Thr	185		190		195
Tyr Glu Gly Leu Asp Ile Asp Gln Thr Ala Thr Tyr Glu Asp Ile	200		205		210
Val Thr Leu Arg Thr Gly Glu Val Lys Trp Ser Val Gly Glu His	215		220		225
Pro Gly Gln Glu					

<210> 141  
 <211> 699  
 <212> PRT  
 <213> Homo sapien

<400> 141  
 Met Gly Leu Pro Glu Pro Gly Pro Leu Arg Leu Leu Ala Leu Leu  
 1 5 10 15  
 Leu Leu Leu Leu Leu Leu Leu Leu Leu Arg Leu Gln His Leu Ala  
 20 25 30  
 Ala Ala Ala Ala Asp Pro Leu Leu Gly Gly Gln Gly Pro Ala Lys  
 35 40 45  
 Glu Cys Glu Lys Asp Gln Phe Gln Cys Arg Asn Glu Arg Cys Ile  
 50 55 60  
 Pro Ser Val Trp Arg Cys Asp Glu Asp Asp Asp Cys Leu Asp His  
 65 70 75  
 Ser Asp Glu Asp Asp Cys Pro Lys Lys Thr Cys Ala Asp Ser Asp  
 80 85 90

Phe Thr Cys Asp	Asn Gly His Cys Ile	His Glu Arg Trp Lys Cys	95	100	105
Asp Gly Glu Glu	Glu Cys Pro Asp Gly	Ser Asp Glu Ser Glu Ala	110	115	120
Thr Cys Thr Lys	Gln Val Cys Pro Ala	Glu Lys Leu Ser Cys Gly	125	130	135
Pro Thr Ser His	Lys Cys Val Pro Ala	Ser Trp Arg Cys Asp Gly	140	145	150
Glu Lys Asp Cys	Glu Gly Gly Ala Asp	Glu Ala Gly Cys Ala Thr	155	160	165
Ser Leu Gly Thr	Cys Arg Gly Asp Glu	Phe Gln Cys Gly Asp Gly	170	175	180
Thr Cys Val Leu	Ala Ile Lys His Cys	Asn Gln Glu Gln Asp Cys	185	190	195
Pro Asp Gly Ser	Asp Glu Ala Gly Cys	Leu Gln Gly Leu Asn Glu	200	205	210
Cys Leu His Asn	Asn Gly Gly Cys Ser	His Ile Cys Thr Asp Leu	215	220	225
Lys Ile Gly Phe	Glu Cys Thr Cys Pro	Ala Gly Phe Gln Leu Leu	230	235	240
Asp Gln Lys Thr	Cys Gly Asp Ile Asp	Glu Cys Lys Asp Pro Asp	245	250	255
Ala Cys Ser Gln	Ile Cys Val Asn Tyr	Lys Gly Tyr Phe Lys Cys	260	265	270
Glu Cys Tyr Pro	Gly Cys Glu Met Asp	Leu Leu Thr Lys Asn Cys	275	280	285
Lys Ala Ala Ala	Gly Lys Ser Pro Ser	Leu Ile Phe Thr Asn Arg	290	295	300
Thr Ser Ala Glu	Asp Arg Pro Val Lys	Arg Asn Tyr Ser Arg Leu	305	310	315
Ile Pro Met Leu	Lys Asn Val Val Ala	Leu Asp Val Glu Val Ala	320	325	330
Thr Asn Arg Ile	Tyr Trp Cys Asp Leu	Ser Tyr Arg Lys Ile Tyr	335	340	345
Ser Ala Tyr Met	Asp Lys Ala Ser Asp	Pro Lys Glu Arg Glu Val	350	355	360
Leu Ile Asp Glu	Gln Leu His Ser Pro	Glu Gly Leu Ala Val Asp	365	370	375
Trp Val His Lys	His Ile Tyr Trp Thr	Asp Ser Gly Asn Lys Thr			



380										385					390				
Ile	Ser	Val	Ala	Thr	Val	Asp	Gly	Gly	Arg	Arg	Arg	Arg	Thr	Leu	Phe				
				395					400						405				
Ser	Arg	Asn	Leu	Ser	Glu	Pro	Arg	Ala	Ile	Ala	Val	Asp	Pro	Leu					
				410					415						420				
Arg	Gly	Phe	Met	Tyr	Trp	Ser	Asp	Trp	Gly	Asp	Gln	Ala	Lys	Ile					
				425					430						435				
Glu	Lys	Ser	Gly	Leu	Asn	Gly	Val	Asp	Arg	Gln	Thr	Leu	Val	Ser					
				440					445						450				
Asp	Asn	Ile	Glu	Trp	Pro	Asn	Gly	Ile	Thr	Leu	Asp	Leu	Leu	Ser					
				455					460						465				
Gln	Arg	Leu	Tyr	Trp	Val	Asp	Ser	Lys	Leu	His	Gln	Leu	Ser	Ser					
				470					475						480				
Ile	Asp	Phe	Ser	Gly	Gly	Asn	Arg	Lys	Thr	Leu	Ile	Ser	Ser	Thr					
				485					490						495				
Asp	Phe	Leu	Ser	His	Pro	Phe	Gly	Ile	Ala	Val	Phe	Glu	Asp	Lys					
				500					505						510				
Val	Phe	Trp	Thr	Asp	Leu	Glu	Asn	Glu	Ala	Ile	Phe	Ser	Ala	Asn					
				515					520						525				
Arg	Leu	Asn	Gly	Leu	Glu	Ile	Ser	Ile	Leu	Ala	Glu	Asn	Leu	Asn					
				530					535						540				
Asn	Pro	His	Asp	Ile	Val	Ile	Phe	His	Glu	Leu	Lys	Gln	Pro	Arg					
				545					550						555				
Ala	Pro	Asp	Ala	Cys	Glu	Leu	Ser	Val	Gln	Pro	Asn	Gly	Gly	Cys					
				560					565						570				
Glu	Tyr	Leu	Cys	Leu	Pro	Ala	Pro	Gln	Ile	Ser	Ser	His	Ser	Pro					
				575					580						585				
Lys	Tyr	Thr	Cys	Ala	Cys	Pro	Asp	Thr	Met	Trp	Leu	Gly	Pro	Asp					
				590					595						600				
Met	Lys	Arg	Cys	Tyr	Arg	Asp	Ala	Asn	Glu	Asp	Ser	Lys	Met	Gly					
				605					610						615				
Ser	Thr	Val	Thr	Ala	Ala	Val	Ile	Gly	Ile	Ile	Val	Pro	Ile	Val					
				620					625						630				
Val	Ile	Ala	Leu	Leu	Cys	Met	Ser	Gly	Tyr	Leu	Ile	Trp	Arg	Asn					
				635					640						645				
Trp	Lys	Arg	Lys	Asn	Thr	Lys	Ser	Met	Asn	Phe	Asp	Asn	Pro	Val					
				650					655						660				
Tyr	Arg	Lys	Thr	Thr	Glu	Glu	Glu	Asp	Glu	Asp	Glu	Leu	His	Ile					
				665					670						675				

Gly Arg Thr Ala Gln Ile Gly His Val Tyr Pro Ala Arg Val Ala  
680 685 690

Leu Ser Leu Glu Asp Asp Gly Leu Pro  
695

<210> 142  
<211> 287  
<212> PRT  
<213> Homo sapien

<400> 142  
Met Pro Pro Leu Trp Ala Leu Leu Ala Leu Gly Cys Leu Arg Phe  
1 5 10 15  
Gly Ser Ala Val Asn Leu Gln Pro Gln Leu Ala Ser Val Thr Phe  
20 25 30  
Ala Thr Asn Asn Pro Thr Leu Thr Thr Val Ala Leu Glu Lys Pro  
35 40 45  
Leu Cys Met Phe Asp Ser Lys Glu Ala Leu Thr Gly Thr His Glu  
50 55 60  
Val Tyr Leu Tyr Val Leu Val Asp Ser Ala Ile Ser Arg Asn Ala  
65 70 75  
Ser Val Gln Asp Ser Thr Asn Thr Pro Leu Gly Ser Thr Phe Leu  
80 85 90  
Gln Thr Glu Gly Gly Arg Thr Gly Pro Tyr Lys Ala Val Ala Phe  
95 100 105  
Asp Leu Ile Pro Cys Ser Asp Leu Pro Ser Leu Asp Ala Ile Gly  
110 115 120  
Asp Val Ser Lys Ala Ser Gln Ile Leu Asn Ala Tyr Leu Val Arg  
125 130 135  
Val Gly Ala Asn Gly Thr Cys Leu Trp Asp Pro Asn Phe Gln Gly  
140 145 150  
Leu Cys Asn Ala Pro Leu Ser Ala Ala Thr Glu Tyr Arg Phe Lys  
155 160 165  
Tyr Val Leu Val Asn Met Ser Thr Gly Leu Val Glu Asp Gln Thr  
170 175 180  
Leu Trp Ser Asp Pro Ile Arg Thr Asn Gln Leu Thr Pro Tyr Ser  
185 190 195  
Thr Ile Asp Thr Trp Pro Gly Arg Arg Ser Gly Gly Met Ile Val  
200 205 210  
Ile Thr Ser Ile Leu Gly Ser Leu Pro Phe Phe Leu Leu Val Gly  
215 220 225  
Phe Ala Gly Ala Ile Ala Leu Ser Leu Val Asp Met Gly Ser Ser

230	235	240
Asp Gly Glu Thr Thr His Asp Ser Gln Ile Thr Gln Glu Ala Val		
245	250	255
Pro Lys Ser Leu Gly Ala Ser Glu Ser Ser Tyr Thr Ser Val Asn		
260	265	270
Arg Gly Pro Pro Leu Asp Arg Ala Glu Val Tyr Ser Ser Lys Leu		
275	280	285
Gln Asp		
<210> 143		
<211> 196		
<212> PRT		
<213> Homo sapien		
<400> 143		
Met Arg Lys Leu Ile Ala Gly Leu Ile Phe Leu Lys Phe Trp Thr		
1	5	10 15
Tyr Thr Val Arg Ala Ser Thr Asp Leu Pro Gln Thr Glu Asn Cys		
20	25	30
Phe Gln Tyr Ile His Gln Val Thr Glu Ile Ser Ser Thr Leu Pro		
35	40	45
Val Ala Leu Leu Arg Asp Glu Val Pro Gly Trp Phe Leu Lys Val		
50	55	60
Pro Glu Pro Gln Leu Ile Ser Lys Glu Leu Ile Met Leu Thr Glu		
65	70	75
Val Met Glu Val Trp His Gly Leu Val Ile Ala Val Val Ser Leu		
80	85	90
Phe Leu Gln Ala Cys Phe Leu Thr Ala Ile Asn Tyr Leu Leu Ser		
95	100	105
Arg His Met Ala His Lys Ser Glu Gln Ile Leu Lys Ala Ala Ser		
110	115	120
Leu Gln Val Pro Arg Pro Ser Pro Gly His His His Pro Pro Ala		
125	130	135
Val Lys Glu Met Lys Glu Thr Gln Thr Glu Arg Asp Ile Pro Met		
140	145	150
Ser Asp Ser Leu Tyr Arg His Asp Ser Asp Thr Pro Ser Asp Ser		
155	160	165
Leu Asp Ser Ser Cys Ser Ser Pro Pro Ala Cys Gln Ala Thr Glu		
170	175	180
Asp Val Asp Tyr Thr Gln Val Val Phe Ser Asp Pro Gly Glu Leu		
185	190	195

# Lys

<210> 144

<211> 580

<212> PRT

<213> Homo sapien

<400> 144

Met	Ala	Gly	Thr	Val	Arg	Thr	Ala	Cys	Leu	Val	Val	Ala	Met	Leu
1				5					10					15

Leu	Ser	Leu	Asp	Phe	Pro	Gly	Gln	Ala	Gln	Pro	Pro	Pro	Pro	Pro
				20					25					30

Pro	Asp	Ala	Thr	Cys	His	Gln	Val	Arg	Ser	Phe	Phe	Gln	Arg	Leu
				35					40					45

Gln	Pro	Gly	Leu	Lys	Trp	Val	Pro	Glu	Thr	Pro	Val	Pro	Gly	Ser
				50					55					60

Asp	Leu	Gln	Val	Cys	Leu	Pro	Lys	Gly	Pro	Thr	Cys	Cys	Ser	Arg
				65					70					75

Lys	Met	Glu	Glu	Lys	Tyr	Gln	Leu	Thr	Ala	Arg	Leu	Asn	Met	Glu
				80					85					90

Gln	Leu	Leu	Gln	Ser	Ala	Ser	Met	Glu	Leu	Lys	Phe	Leu	Ile	Ile
				95					100					105

Gln	Asn	Ala	Ala	Val	Phe	Gln	Glu	Ala	Phe	Glu	Ile	Val	Val	Arg
				110					115					120

His	Ala	Lys	Asn	Tyr	Thr	Asn	Ala	Met	Phe	Lys	Asn	Asn	Tyr	Pro
				125					130					135

Ser	Leu	Thr	Pro	Gln	Ala	Phe	Glu	Phe	Val	Gly	Glu	Phe	Phe	Thr
				140					145					150

Asp	Val	Ser	Leu	Tyr	Ile	Leu	Gly	Ser	Asp	Ile	Asn	Val	Asp	Asp
				155					160					165

Met	Val	Asn	Glu	Leu	Phe	Asp	Ser	Leu	Phe	Pro	Val	Ile	Tyr	Thr
				170					175					180

Gln	Leu	Met	Asn	Pro	Gly	Leu	Pro	Asp	Ser	Ala	Leu	Asp	Ile	Asn
				185					190					195

Glu	Cys	Leu	Arg	Gly	Ala	Arg	Arg	Asp	Leu	Lys	Val	Phe	Gly	Asn
				200					205					210

Phe	Pro	Lys	Leu	Ile	Met	Thr	Gln	Val	Ser	Lys	Ser	Leu	Gln	Val
				215					220					225

Thr	Arg	Ile	Phe	Leu	Gln	Ala	Leu	Asn	Leu	Gly	Ile	Glu	Val	Ile
				230					235					240

Asn	Thr	Thr	Asp	His	Leu	Lys	Phe	Ser	Lys	Asp	Cys	Gly	Arg	Met
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

245	250	255
Leu Thr Arg Met Trp Tyr Cys Ser Tyr Cys Gln Gly Leu Met Met		
260	265	270
Val Lys Pro Cys Gly Gly Tyr Cys Asn Val Val Met Gln Gly Cys		
275	280	285
Met Ala Gly Val Val Glu Ile Asp Lys Tyr Trp Arg Glu Tyr Ile		
290	295	300
Leu Ser Leu Glu Glu Leu Val Asn Gly Met Tyr Arg Ile Tyr Asp		
305	310	315
Met Glu Asn Val Leu Leu Gly Leu Phe Ser Thr Ile His Asp Ser		
320	325	330
Ile Gln Tyr Val Gln Lys Asn Ala Gly Lys Leu Thr Thr Thr Ile		
335	340	345
Gly Lys Leu Cys Ala His Ser Gln Gln Arg Gln Tyr Arg Ser Ala		
350	355	360
Tyr Tyr Pro Glu Asp Leu Phe Ile Asp Lys Lys Val Leu Lys Val		
365	370	375
Ala His Val Glu His Glu Glu Thr Leu Ser Ser Arg Arg Arg Glu		
380	385	390
Leu Ile Gln Lys Leu Lys Ser Phe Ile Ser Phe Tyr Ser Ala Leu		
395	400	405
Pro Gly Tyr Ile Cys Ser His Ser Pro Val Ala Glu Asn Asp Thr		
410	415	420
Leu Cys Trp Asn Gly Gln Glu Leu Met Glu Arg Tyr Ser Gln Lys		
425	430	435
Ala Ala Arg Asn Gly Met Lys Asn Gln Phe Asn Leu His Glu Leu		
440	445	450
Lys Met Lys Gly Pro Glu Pro Val Val Ser Gln Ile Ile Asp Lys		
455	460	465
Leu Lys His Ile Asn Gln Leu Leu Arg Thr Met Ser Met Pro Lys		
470	475	480
Gly Arg Val Leu Asp Lys Asn Leu Asp Glu Glu Gly Phe Glu Ser		
485	490	495
Gly Asp Cys Gly Asp Asp Glu Asp Glu Cys Ile Gly Gly Ser Gly		
500	505	510
Asp Gly Met Ile Lys Val Lys Asn Gln Leu Arg Phe Leu Ala Glu		
515	520	525
Leu Ala Tyr Asp Leu Asp Val Asp Asp Ala Pro Gly Asn Ser Gln		
530	535	540

Gln Ala Thr Pro Lys Asp Asn Glu Ile Ser Thr Phe His Asn Leu  
545 550 555

Gly Asn Val His Ser Pro Leu Lys Leu Leu Thr Ser Met Ala Ile  
560 565 570

Ser Val Val Cys Phe Phe Phe Leu Val His  
575 580

<210> 145

<211> 829

<212> PRT

<213> Homo sapien

<400> 145

Met Gly Leu Pro Arg Gly Pro Leu Ala Ser Leu Leu Leu Leu Gln  
1 5 10 15

Val Cys Trp Leu Gln Cys Ala Ala Ser Glu Pro Cys Arg Ala Val  
20 25 30

Phe Arg Glu Ala Glu Val Thr Leu Glu Ala Gly Gly Ala Glu Gln  
35 40 45

Glu Pro Gly Gln Ala Leu Gly Lys Val Phe Met Gly Cys Pro Gly  
50 55 60

Gln Glu Pro Ala Leu Phe Ser Thr Asp Asn Asp Asp Phe Thr Val  
65 70 75

Arg Asn Gly Glu Thr Val Gln Glu Arg Arg Ser Leu Lys Glu Arg  
80 85 90

Asn Pro Leu Lys Ile Phe Pro Ser Lys Arg Ile Leu Arg Arg His  
95 100 105

Lys Arg Asp Trp Val Val Ala Pro Ile Ser Val Pro Glu Asn Gly  
110 115 120

Lys Gly Pro Phe Pro Gln Arg Leu Asn Gln Leu Lys Ser Asn Lys  
125 130 135

Asp Arg Asp Thr Lys Ile Phe Tyr Ser Ile Thr Gly Pro Gly Ala  
140 145 150

Asp Ser Pro Pro Glu Gly Val Phe Ala Val Glu Lys Glu Thr Gly  
155 160 165

Trp Leu Leu Leu Asn Lys Pro Leu Asp Arg Glu Glu Ile Ala Lys  
170 175 180

Tyr Glu Leu Phe Gly His Ala Val Ser Glu Asn Gly Ala Ser Val  
185 190 195

Glu Asp Pro Met Asn Ile Ser Ile Ile Val Thr Asp Gln Asn Asp  
200 205 210

His Lys Pro Lys Phe Thr Gln Asp Thr Phe Arg Gly Ser Val Leu

215	220	225
Glu Gly Val Leu Pro Gly Thr Ser Val	Met Gln Val Thr Ala Thr	
230	235	240
Asp Glu Asp Asp Ala Ile Tyr Thr Tyr	Asn Gly Val Val Ala Tyr	
245	250	255
Ser Ile His Ser Gln Glu Pro Lys Asp	Pro His Asp Leu Met Phe	
260	265	270
Thr Ile His Arg Ser Thr Gly Thr Ile	Ser Val Ile Ser Ser Gly	
275	280	285
Leu Asp Arg Glu Lys Val Pro Glu Tyr	Thr Leu Thr Ile Gln Ala	
290	295	300
Thr Asp Met Asp Gly Asp Gly Ser Thr	Thr Thr Ala Val Ala Val	
305	310	315
Val Glu Ile Leu Asp Ala Asn Asp Asn	Ala Pro Met Phe Asp Pro	
320	325	330
Gln Lys Tyr Glu Ala His Val Pro Glu	Asn Ala Val Gly His Glu	
335	340	345
Val Gln Arg Leu Thr Val Thr Asp Leu	Asp Ala Pro Asn Ser Pro	
350	355	360
Ala Trp Arg Ala Thr Tyr Leu Ile Met	Gly Gly Asp Asp Gly Asp	
365	370	375
His Phe Thr Ile Thr Thr His Pro Glu	Ser Asn Gln Gly Ile Leu	
380	385	390
Thr Thr Arg Lys Gly Leu Asp Phe Glu	Ala Lys Asn Gln His Thr	
395	400	405
Leu Tyr Val Glu Val Thr Asn Glu Ala	Pro Phe Val Leu Lys Leu	
410	415	420
Pro Thr Ser Thr Ala Thr Ile Val Val	His Val Glu Asp Val Asn	
425	430	435
Glu Ala Pro Val Phe Val Pro Pro Ser	Lys Val Val Glu Val Gln	
440	445	450
Glu Gly Ile Pro Thr Gly Glu Pro Val	Cys Val Tyr Thr Ala Glu	
455	460	465
Asp Pro Asp Lys Glu Asn Gln Lys Ile	Ser Tyr Arg Ile Leu Arg	
470	475	480
Asp Pro Ala Gly Trp Leu Ala Met Asp	Pro Asp Ser Gly Gln Val	
485	490	495
Thr Ala Val Gly Thr Leu Asp Arg Glu	Asp Glu Gln Phe Val Arg	
500	505	510

Asn Asn Ile Tyr	Glu Val Met Val Leu	Ala Met Asp Asn Gly	Ser
515		520	525
Pro Pro Thr Thr	Gly Thr Gly Thr Leu	Leu Leu Thr Leu Ile	Asp
530		535	540
Val Asn Asp His	Gly Pro Val Pro Glu	Pro Arg Gln Ile Thr	Ile
545		550	555
Cys Asn Gln Ser	Pro Val Arg His Val	Leu Asn Ile Thr Asp	Lys
560		565	570
Asp Leu Ser Pro	His Thr Ser Pro Phe	Gln Ala Gln Leu Thr	Asp
575		580	585
Asp Ser Asp Ile	Tyr Trp Thr Ala Glu	Val Asn Glu Glu Gly	Asp
590		595	600
Thr Val Val Leu	Ser Leu Lys Lys Phe	Leu Lys Gln Asp Thr	Tyr
605		610	615
Asp Val His Leu	Ser Leu Ser Asp His	Gly Asn Lys Glu Gln	Leu
620		625	630
Thr Val Ile Arg	Ala Thr Val Cys Asp	Cys His Gly His Val	Glu
635		640	645
Thr Cys Pro Gly	Pro Trp Lys Gly Gly	Phe Ile Leu Pro Val	Leu
650		655	660
Gly Ala Val Leu	Ala Leu Leu Phe Leu	Leu Leu Val Leu Leu	Leu
665		670	675
Leu Val Arg Lys	Lys Arg Lys Ile Lys	Glu Pro Leu Leu Leu	Pro
680		685	690
Glu Asp Asp Thr	Arg Asp Asn Val Phe	Tyr Tyr Gly Glu Glu	Gly
695		700	705
Gly Gly Glu Glu	Asp Gln Asp Tyr Asp	Ile Thr Gln Leu His	Arg
710		715	720
Gly Leu Glu Ala	Arg Pro Glu Val Val	Leu Arg Asn Asp Val	Ala
725		730	735
Pro Thr Ile Ile	Pro Thr Pro Met Tyr	Arg Pro Arg Pro Ala	Asn
740		745	750
Pro Asp Glu Ile	Gly Asn Phe Ile Ile	Glu Asn Leu Lys Ala	Ala
755		760	765
Asn Thr Asp Pro	Thr Ala Pro Pro Tyr	Asp Thr Leu Leu Val	Phe
770		775	780
Asp Tyr Glu Gly	Ser Gly Ser Asp Ala	Ala Ser Leu Ser Ser	Leu
785		790	795
Thr Ser Ser Ala	Ser Asp Gln Asp Gln	Asp Tyr Asp Tyr Leu	Asn



800	805	810
Glu Trp Gly Ser Arg Phe Lys Lys Leu Ala Asp Met Tyr Gly Gly		
815	820	825
Gly Glu Asp Asp		
<210> 146		
<211> 462		
<212> PRT		
<213> Homo sapien		
<400> 146		
Gly Asp Cys Gly Asp Arg Gly Thr Ala Arg Gly Thr Arg Arg Glu		
1	5	10 15
Gly Thr Gly Ile Arg Ser Ser Gly Arg Ala Met Asp Gly Asn Asp		
20	25	30
Asn Val Thr Leu Leu Phe Ala Pro Leu Leu Arg Asp Asn Tyr Thr		
35	40	45
Leu Ala Pro Asn Ala Ser Ser Leu Gly Pro Gly Thr Asp Leu Ala		
50	55	60
Leu Ala Pro Ala Ser Ser Ala Gly Pro Gly Pro Gly Leu Ser Leu		
65	70	75
Gly Pro Gly Pro Ser Phe Gly Phe Ser Pro Gly Pro Thr Pro Thr		
80	85	90
Pro Glu Pro Thr Thr Ser Gly Leu Ala Gly Gly Ala Ala Ser His		
95	100	105
Gly Pro Ser Pro Phe Pro Arg Pro Trp Ala Pro His Ala Leu Pro		
110	115	120
Phe Trp Asp Thr Pro Leu Asn His Gly Leu Asn Val Phe Val Gly		
125	130	135
Ala Ala Leu Cys Ile Thr Met Leu Gly Leu Gly Cys Thr Val Asp		
140	145	150
Val Asn His Phe Gly Ala His Val Arg Arg Pro Val Gly Ala Leu		
155	160	165
Leu Ala Ala Leu Cys Gln Phe Gly Leu Leu Pro Leu Leu Ala Phe		
170	175	180
Leu Leu Ala Leu Ala Phe Lys Leu Asp Glu Val Ala Ala Val Ala		
185	190	195
Val Leu Leu Cys Gly Cys Cys Pro Gly Gly Asn Leu Ser Asn Leu		
200	205	210
Met Ser Leu Leu Val Asp Gly Asp Met Asn Leu Ser Ile Ile Met		
215	220	225

Thr	Ile	Ser	Ser	Thr	Leu	Leu	Ala	Leu	Val	Leu	Met	Pro	Leu	Cys	
				230					235					240	
Leu	Trp	Ile	Tyr	Ser	Trp	Ala	Trp	Ile	Asn	Thr	Pro	Ile	Val	Gln	
				245					250					255	
Leu	Leu	Pro	Leu	Gly	Thr	Val	Thr	Leu	Thr	Leu	Cys	Ser	Thr	Leu	
				260					265					270	
Ile	Pro	Ile	Gly	Leu	Gly	Val	Phe	Ile	Arg	Tyr	Lys	Tyr	Ser	Arg	
				275					280					285	
Val	Ala	Asp	Tyr	Ile	Val	Lys	Val	Ser	Leu	Trp	Ser	Leu	Leu	Val	
				290					295					300	
Thr	Leu	Val	Val	Leu	Phe	Ile	Met	Thr	Gly	Thr	Met	Leu	Gly	Pro	
				305					310					315	
Glu	Leu	Leu	Ala	Ser	Ile	Pro	Ala	Ala	Val	Tyr	Val	Ile	Ala	Ile	
				320					325					330	
Phe	Met	Pro	Leu	Ala	Gly	Tyr	Ala	Ser	Gly	Tyr	Gly	Leu	Ala	Thr	
				335					340					345	
Leu	Phe	His	Leu	Pro	Pro	Asn	Cys	Lys	Arg	Thr	Val	Cys	Leu	Glu	
				350					355					360	
Thr	Gly	Ser	Gln	Asn	Val	Gln	Leu	Cys	Thr	Ala	Ile	Leu	Lys	Leu	
				365					370					375	
Ala	Phe	Pro	Pro	Gln	Phe	Ile	Gly	Ser	Met	Tyr	Met	Phe	Pro	Leu	
				380					385					390	
Leu	Tyr	Ala	Leu	Phe	Gln	Ser	Ala	Glu	Ala	Gly	Ile	Phe	Val	Leu	
				395					400					405	
Ile	Tyr	Lys	Met	Tyr	Gly	Ser	Glu	Met	Leu	His	Lys	Arg	Asp	Pro	
				410					415					420	
Leu	Asp	Glu	Asp	Glu	Asp	Thr	Asp	Ile	Ser	Tyr	Lys	Lys	Leu	Lys	
				425					430					435	
Glu	Glu	Glu	Met	Ala	Asp	Thr	Ser	Tyr	Gly	Thr	Val	Lys	Ala	Glu	
				440					445					450	
Asn	Ile	Ile	Met	Met	Glu	Thr	Ala	Gln	Thr	Ser	Leu				
				455					460						
<210> 147															
<211> 335															
<212> PRT															
<213> Homo sapien															
<400> 147															
Met	Val	Arg	Arg	Asp	Arg	Leu	Arg	Arg	Met	Arg	Glu	Trp	Trp	Val	
1				5					10					15	
Gln	Val	Gly	Leu	Leu	Ala	Val	Pro	Leu	Leu	Ala	Ala	Tyr	Leu	His	

20										25					30				
Ile	Pro	Pro	Pro	Gln	Leu	Ser	Pro	Ala	Leu	His	Ser	Trp	Lys	Ser					
				35					40					45					
Ser	Gly	Lys	Phe	Phe	Thr	Tyr	Lys	Gly	Leu	Arg	Ile	Phe	Tyr	Gln					
				50					55					60					
Asp	Ser	Val	Gly	Val	Val	Gly	Ser	Pro	Glu	Ile	Val	Val	Leu	Leu					
				65					70					75					
His	Gly	Phe	Pro	Thr	Ser	Ser	Tyr	Asp	Trp	Tyr	Lys	Ile	Trp	Lys					
				80					85					90					
Gly	Leu	Thr	Leu	Arg	Phe	His	Arg	Val	Ile	Ala	Leu	Asp	Phe	Leu					
				95					100					105					
Gly	Phe	Gly	Phe	Ser	Asp	Lys	Pro	Arg	Pro	His	His	Tyr	Ser	Ile					
				110					115					120					
Phe	Glu	Gln	Ala	Ser	Ile	Val	Glu	Ala	Leu	Leu	Arg	His	Leu	Gly					
				125					130					135					
Leu	Gln	Asn	Arg	Arg	Ile	Asn	Leu	Leu	Ser	His	Asp	Tyr	Gly	Asp					
				140					145					150					
Ile	Val	Ala	Gln	Glu	Leu	Leu	Tyr	Arg	Tyr	Lys	Gln	Asn	Arg	Ser					
				155					160					165					
Gly	Arg	His	Thr	Ile	Lys	Ser	Leu	Cys	Leu	Ser	Asn	Gly	Gly	Ile					
				170					175					180					
Phe	Pro	Glu	Thr	His	Arg	Pro	Leu	Leu	Leu	Gln	Lys	Leu	Leu	Lys					
				185					190					195					
Asp	Gly	Gly	Val	Leu	Ser	Pro	Ile	Leu	Thr	Arg	Leu	Met	Asn	Phe					
				200					205					210					
Phe	Val	Phe	Ser	Arg	Gly	Leu	Thr	Pro	Val	Phe	Gly	Pro	Tyr	Thr					
				215					220					225					
Arg	Pro	Ser	Glu	Ser	Glu	Leu	Trp	Asp	Met	Trp	Ala	Gly	Ile	Arg					
				230					235					240					
Asn	Asn	Asp	Gly	Asn	Leu	Val	Ile	Asp	Ser	Leu	Leu	Gln	Tyr	Ile					
				245					250					255					
Asn	Gln	Arg	Lys	Lys	Phe	Arg	Arg	Arg	Trp	Val	Gly	Ala	Leu	Ala					
				260					265					270					
Ser	Val	Thr	Ile	Pro	Ile	His	Phe	Ile	Tyr	Gly	Pro	Leu	Asp	Pro					
				275					280					285					
Val	Asn	Pro	Tyr	Pro	Glu	Phe	Leu	Glu	Leu	Tyr	Arg	Lys	Thr	Leu					
				290					295					300					
Pro	Arg	Ser	Thr	Val	Ser	Ile	Leu	Asp	Asp	His	Ile	Ser	His	Tyr					
				305					310					315					

Pro Gln Leu Glu Asp Pro Met Gly Phe Leu Asn Ala Tyr Met Gly  
 320 325 330

Phe Ile Asn Ser Phe  
 335

<210> 148

<211> 1537

<212> PRT

<213> Homo sapien

<400> 148

Gly Trp Thr Ser His Leu Ser Asn Cys Gly Glu Ser Asn Arg Pro  
 1 5 10 15

Pro Lys Glu Arg Ser Cys Phe Arg Val Cys Asp Trp His Ser Asp  
 20 25 30

Leu Phe Gln Trp Glu Val Ser Asp Trp His His Cys Val Leu Val  
 35 40 45

Pro Tyr Ala Arg Gly Glu Val Lys Pro Arg Thr Ala Glu Cys Val  
 50 55 60

Thr Ala Gln His Gly Leu Gln His Arg Met Val Arg Cys Ile Gln  
 65 70 75

Lys Leu Asn Arg Thr Val Val Ala Asn Glu Ile Cys Glu His Phe  
 80 85 90

Ala Leu Gln Pro Pro Thr Glu Gln Ala Cys Leu Ile Pro Cys Pro  
 95 100 105

Arg Asp Cys Val Val Ser Glu Phe Leu Pro Trp Ser Asn Cys Ser  
 110 115 120

Lys Gly Cys Gly Lys Lys Leu Gln His Arg Thr Arg Ala Val Ile  
 125 130 135

Ala Pro Pro Leu Phe Gly Gly Leu Gln Cys Pro Asn Leu Thr Glu  
 140 145 150

Ser Arg Ala Cys Asp Ala Pro Ile Ser Cys Pro Leu Gly Glu Glu  
 155 160 165

Glu Tyr Thr Phe Ser Leu Lys Val Gly Pro Trp Ser Lys Cys Arg  
 170 175 180

Leu Pro His Leu Lys Glu Ile Asn Pro Ser Gly Arg Thr Val Leu  
 185 190 195

Asp Phe Asn Ser Asp Ser Asn Glu Arg Val Thr Phe Lys His Gln  
 200 205 210

Ser Tyr Lys Ala His His His Ser Lys Ser Trp Ala Ile Glu Ile  
 215 220 225

Gly Tyr Gln Thr Arg Gln Val Ser Cys Thr Arg Ser Asp Gly Gln

230	235	240
Asn Ala Met Leu Ser Leu Cys Leu Gln Asp Ser Phe Pro Leu Thr		
245	250	255
Val Gln Ser Cys Ile Met Pro Lys Asp Cys Glu Thr Ser Gln Trp		
260	265	270
Ser Ser Trp Ser Pro Cys Ser Lys Thr Cys Arg Ser Gly Ser Leu		
275	280	285
Leu Pro Gly Phe Arg Ser Arg Ser Arg Asn Val Lys His Met Ala		
290	295	300
Ile Gly Gly Gly Lys Glu Cys Pro Glu Leu Leu Glu Lys Glu Ala		
305	310	315
Cys Ile Val Glu Gly Glu Leu Leu Gln Gln Cys Pro Arg Tyr Ser		
320	325	330
Trp Arg Thr Ser Glu Trp Lys Glu Cys Gln Val Ser Leu Leu Leu		
335	340	345
Glu Gln Gln Asp Pro His Trp His Val Thr Gly Pro Val Cys Gly		
350	355	360
Gly Gly Ile Gln Thr Arg Glu Val Tyr Cys Ala Gln Ser Val Pro		
365	370	375
Ala Ala Ala Ala Leu Arg Ala Lys Glu Val Ser Arg Pro Val Glu		
380	385	390
Lys Ala Leu Cys Val Gly Pro Ala Pro Leu Pro Ser Gln Leu Cys		
395	400	405
Asn Ile Pro Cys Ser Thr Asp Cys Ile Val Ser Ser Trp Ser Ala		
410	415	420
Trp Gly Leu Cys Ile His Glu Asn Cys His Glu Pro Gln Gly Lys		
425	430	435
Lys Gly Phe Arg Thr Arg Gln Arg His Val Leu Met Glu Ser Thr		
440	445	450
Gly Pro Ala Gly His Cys Pro His Leu Val Glu Ser Val Pro Cys		
455	460	465
Glu Asp Pro Met Cys Tyr Arg Trp Leu Ala Ser Glu Gly Ile Cys		
470	475	480
Phe Pro Asp His Gly Lys Cys Gly Leu Gly His Arg Ile Leu Lys		
485	490	495
Ala Val Cys Gln Asn Asp Arg Gly Glu Asp Val Ser Gly Ser Leu		
500	505	510
Cys Pro Val Pro Pro Pro Pro Glu Arg Lys Ser Cys Glu Ile Pro		
515	520	525

Cys Arg Met Asp	Cys Val Leu Ser Glu Trp Thr Glu Trp Ser Ser	530	535	540
Cys Ser Gln Ser	Cys Ser Asn Lys Asn Ser Asp Gly Lys Gln Thr	545	550	555
Arg Ser Arg Thr	Ile Leu Ala Leu Ala Gly Glu Gly Gly Lys Pro	560	565	570
Cys Pro Pro Ser	Gln Ala Leu Gln Glu His Arg Leu Cys Asn Asp	575	580	585
His Ser Cys Met	Gln Leu His Trp Glu Thr Ser Pro Trp Gly Pro	590	595	600
Cys Ser Glu Asp	Thr Leu Val Thr Ala Leu Asn Ala Thr Ile Gly	605	610	615
Trp Asn Gly Glu	Ala Thr Cys Gly Val Gly Ile Gln Thr Arg Arg	620	625	630
Val Phe Cys Val	Lys Ser His Val Gly Gln Val Met Thr Lys Arg	635	640	645
Cys Pro Asp Ser	Thr Arg Pro Glu Thr Val Arg Pro Cys Phe Leu	650	655	660
Pro Cys Lys Lys	Asp Cys Ile Val Thr Ala Phe Ser Glu Trp Thr	665	670	675
Pro Cys Pro Arg	Met Cys Gln Ala Gly Asn Ala Thr Val Lys Gln	680	685	690
Ser Arg Tyr Arg	Ile Ile Ile Gln Glu Ala Ala Asn Gly Gly Gln	695	700	705
Glu Cys Pro Asp	Thr Leu Tyr Glu Glu Arg Glu Cys Glu Asp Val	710	715	720
Ser Leu Cys Pro	Val Tyr Arg Trp Lys Pro Gln Lys Trp Ser Pro	725	730	735
Cys Ile Leu Val	Pro Glu Ser Val Trp Gln Gly Ile Thr Gly Ser	740	745	750
Ser Glu Ala Cys	Gly Lys Gly Leu Gln Thr Arg Ala Val Ser Cys	755	760	765
Ile Ser Asp Asp	Asn Arg Ser Ala Glu Met Met Glu Cys Leu Lys	770	775	780
Gln Thr Asn Gly	Met Pro Leu Leu Val Gln Glu Cys Thr Val Pro	785	790	795
Cys Arg Glu Asp	Cys Thr Phe Thr Ala Trp Ser Lys Phe Thr Pro	800	805	810
Cys Ser Thr Asn	Cys Glu Ala Thr Lys Ser Arg Arg Arg Gln Leu			

815	820	825
Thr Gly Lys Ser Arg Lys Lys Glu Lys Cys Gln Asp Ser Asp Leu		
830	835	840
Tyr Pro Leu Val Glu Thr Glu Leu Cys Pro Cys Asp Glu Phe Ile		
845	850	855
Ser Gln Pro Tyr Gly Asn Trp Ser Asp Cys Ile Leu Pro Glu Gly		
860	865	870
Arg Arg Glu Pro His Arg Gly Leu Arg Val Gln Ala Asp Ser Lys		
875	880	885
Glu Cys Gly Glu Gly Leu Arg Phe Arg Ala Val Ala Cys Ser Asp		
890	895	900
Lys Asn Gly Arg Pro Val Asp Pro Ser Phe Cys Ser Ser Ser Gly		
905	910	915
Tyr Ile Gln Glu Lys Cys Val Ile Pro Cys Pro Phe Asp Cys Lys		
920	925	930
Leu Ser Asp Trp Ser Ser Trp Gly Ser Cys Ser Ser Ser Cys Gly		
935	940	945
Ile Gly Val Arg Ile Arg Ser Lys Trp Leu Lys Glu Lys Pro Tyr		
950	955	960
Asn Gly Gly Arg Pro Cys Pro Lys Leu Asp Leu Lys Asn Gln Ala		
965	970	975
Gln Val His Glu Ala Val Pro Cys Tyr Ser Glu Cys Asn Gln Tyr		
980	985	990
Ser Trp Val Val Glu His Trp Ser Ser Cys Lys Ile Asn Asn Glu		
995	1000	1005
Leu Arg Ser Leu Arg Cys Gly Gly Gly Thr Gln Ser Arg Lys Ile		
1010	1015	1020
Arg Cys Val Asn Thr Ala Asp Gly Glu Gly Gly Ala Val Asp Ser		
1025	1030	1035
Asn Leu Cys Asn Gln Asp Glu Ile Pro Pro Glu Thr Gln Ser Cys		
1040	1045	1050
Ser Leu Met Cys Pro Asn Glu Cys Val Met Ser Glu Trp Gly Leu		
1055	1060	1065
Trp Ser Lys Cys Pro Gln Ser Cys Asp Pro His Thr Met Gln Arg		
1070	1075	1080
Arg Thr Arg His Leu Leu Arg Pro Ser Leu Asn Ser Arg Thr Cys		
1085	1090	1095
Ala Glu Asp Ser Gln Val Gln Pro Cys Leu Leu Asn Glu Asn Cys		
1100	1105	1110

Phe Gln Phe Gln Tyr Asn Leu Thr Glu Trp Ser Thr Cys Gln Leu	1115	1120	1125
Ser Glu Asn Ala Pro Cys Gly Gln Gly Val Arg Thr Arg Leu Leu	1130	1135	1140
Ser Cys Val Cys Ser Asp Gly Lys Pro Val Ser Met Asp Gln Cys	1145	1150	1155
Glu Gln His Asn Leu Glu Lys Pro Gln Arg Met Ser Ile Pro Cys	1160	1165	1170
Leu Val Glu Cys Val Val Asn Cys Gln Leu Ser Gly Trp Thr Ala	1175	1180	1185
Trp Thr Glu Cys Ser Gln Thr Cys Gly His Gly Gly Arg Met Ser	1190	1195	1200
Arg Thr Arg Phe Ile Ile Met Pro Thr Gln Gly Glu Gly Arg Pro	1205	1210	1215
Cys Pro Thr Glu Leu Thr Gln Glu Lys Thr Cys Pro Val Thr Pro	1220	1225	1230
Cys Tyr Ser Trp Val Leu Gly Asn Trp Ser Ala Cys Lys Leu Glu	1235	1240	1245
Gly Gly Asp Cys Gly Glu Gly Val Gln Ile Arg Ser Leu Ser Cys	1250	1255	1260
Met Val His Ser Gly Ser Ile Ser His Ala Ala Gly Arg Val Glu	1265	1270	1275
Asp Ala Leu Cys Gly Glu Met Pro Phe Gln Asp Ser Ile Leu Lys	1280	1285	1290
Gln Leu Cys Ser Val Pro Cys Pro Gly Asp Cys His Leu Thr Glu	1295	1300	1305
Trp Ser Glu Trp Ser Thr Cys Glu Leu Thr Cys Ile Asp Gly Arg	1310	1315	1320
Ser Phe Glu Thr Val Gly Arg Gln Ser Arg Ser Arg Thr Phe Ile	1325	1330	1335
Ile Gln Ser Phe Glu Asn Gln Asp Ser Cys Pro Gln Gln Val Leu	1340	1345	1350
Glu Thr Arg Pro Cys Thr Gly Gly Lys Cys Tyr His Tyr Thr Trp	1355	1360	1365
Lys Ala Ser Leu Trp Asn Asn Asn Glu Arg Thr Val Trp Cys Gln	1370	1375	1380
Arg Ser Asp Gly Val Asn Val Thr Gly Gly Cys Ser Pro Gln Ala	1385	1390	1395
Arg Pro Ala Ala Ile Arg Gln Cys Ile Pro Ala Cys Arg Lys Pro			



1400	1405	1410
Phe Ser Tyr Cys Thr Gln Gly Gly Val Cys Gly Cys Glu Lys Gly		
1415	1420	1425
Tyr Thr Glu Ile Met Arg Ser Asn Gly Phe Leu Asp Tyr Cys Met		
1430	1435	1440
Lys Val Pro Gly Ser Glu Asp Lys Lys Ala Asp Val Lys Asn Leu		
1445	1450	1455
Ser Gly Lys Asn Arg Pro Val Asn Ser Lys Ile His Asp Ile Phe		
1460	1465	1470
Lys Gly Trp Ser Leu Gln Pro Leu Asp Pro Asp Gly Arg Val Lys		
1475	1480	1485
Ile Trp Val Tyr Gly Val Ser Gly Gly Ala Phe Leu Ile Met Ile		
1490	1495	1500
Phe Leu Ile Phe Thr Ser Tyr Leu Val Cys Lys Lys Pro Lys Pro		
1505	1510	1515
His Gln Ser Thr Pro Pro Gln Gln Lys Pro Leu Thr Leu Ala Tyr		
1520	1525	1530
Asp Gly Asp Leu Asp Met Asn		
1535		

<210> 149

<211> 453

<212> PRT

<213> Homo sapien

<400> 149

Glu Lys Pro Val Arg Lys Gln Thr Pro Pro Thr Thr Gln Ile His		
1	5	10
Cys Gly Pro Pro Lys Pro Val Leu Ser Pro Ser Phe Lys Thr Pro		
20	25	30
Ala Thr Pro Leu Gly Leu Ser Thr Ser Thr Gly His Met Leu Met		
35	40	45
Pro Leu Cys Gly Leu Leu Trp Trp Trp Trp Cys Cys Cys Ser Gly		
50	55	60
Trp Tyr Cys Tyr Gly Leu Cys Ala Pro Ala Pro Gln Met Leu Arg		
65	70	75
His Gln Gly Leu Leu Lys Cys Arg Cys Arg Met Leu Phe Asn Asp		
80	85	90
Leu Lys Val Phe Leu Leu Arg Arg Pro Pro Gln Ala Pro Leu Pro		
95	100	105
Met His Gly Asp Pro Gln Pro Pro Gly Leu Ala Ala Asn Asn Thr		
110	115	120

Leu	Pro	Ala	Leu	Gly	Ala	Gly	Gly	Trp	Ala	Gly	Trp	Arg	Gly	Pro		125	130	135
Arg	Glu	Val	Val	Gly	Arg	Glu	Pro	Pro	Pro	Val	Pro	Pro	Pro	Pro		140	145	150
Pro	Leu	Pro	Pro	Ser	Ser	Val	Glu	Asp	Asp	Trp	Gly	Gly	Pro	Ala		155	160	165
Thr	Glu	Pro	Pro	Ala	Ser	Leu	Leu	Ser	Ser	Ala	Ser	Ser	Asp	Asp		170	175	180
Phe	Cys	Lys	Glu	Lys	Thr	Glu	Asp	Arg	Tyr	Ser	Leu	Gly	Ser	Ser		185	190	195
Leu	Asp	Ser	Gly	Met	Arg	Thr	Pro	Leu	Cys	Arg	Ile	Cys	Phe	Gln		200	205	210
Gly	Pro	Glu	Gln	Gly	Glu	Leu	Leu	Ser	Pro	Cys	Arg	Cys	Asp	Gly		215	220	225
Ser	Val	Lys	Cys	Thr	His	Gln	Pro	Cys	Leu	Ile	Lys	Trp	Ile	Ser		230	235	240
Glu	Arg	Gly	Cys	Trp	Ser	Cys	Glu	Leu	Cys	Tyr	Tyr	Lys	Tyr	His		245	250	255
Val	Ile	Ala	Ile	Ser	Thr	Lys	Asn	Pro	Leu	Gln	Trp	Gln	Ala	Ile		260	265	270
Ser	Leu	Thr	Val	Ile	Glu	Lys	Val	Gln	Val	Ala	Ala	Ala	Ile	Leu		275	280	285
Gly	Ser	Leu	Phe	Leu	Ile	Ala	Ser	Ile	Ser	Trp	Leu	Ile	Trp	Ser		290	295	300
Thr	Phe	Ser	Pro	Ser	Ala	Arg	Trp	Gln	Arg	Gln	Asp	Leu	Leu	Phe		305	310	315
Gln	Ile	Cys	Tyr	Gly	Met	Tyr	Gly	Phe	Met	Asp	Val	Val	Cys	Ile		320	325	330
Gly	Leu	Ile	Ile	His	Glu	Gly	Pro	Ser	Val	Tyr	Arg	Ile	Phe	Lys		335	340	345
Arg	Trp	Gln	Ala	Val	Asn	Gln	Gln	Trp	Lys	Val	Leu	Asn	Tyr	Asp		350	355	360
Lys	Thr	Lys	Asp	Leu	Glu	Asp	Gln	Lys	Ala	Gly	Gly	Arg	Thr	Asn		365	370	375
Pro	Arg	Thr	Ser	Ser	Ser	Thr	Gln	Ala	Asn	Ile	Pro	Ser	Ser	Glu		380	385	390
Glu	Glu	Thr	Ala	Gly	Thr	Pro	Ala	Pro	Glu	Gln	Gly	Pro	Ala	Gln		395	400	405
Ala	Ala	Gly	His	Pro	Ser	Gly	Pro	Leu	Ser	His	His	His	Cys	Ala				

410	415	420
Tyr Thr Ile Leu His Ile Leu Ser His Leu Arg Pro His Glu Gln		
425	430	435
Arg Ser Pro Pro Gly Ser Ser Arg Glu Leu Val Met Arg Val Thr		
440	445	450
Thr Val Asn		
<210> 150		
<211> 981		
<212> PRT		
<213> Homo sapien		
<400> 150		
Gln Glu Gln Gly Asp Lys Met Met Glu Glu Tyr Ser Leu Glu Lys		
1	5	10
Asn Glu Arg Ala Cys Ile Asp Phe Ala Ile Ser Ala Lys Pro Leu		
20	25	30
Thr Arg His Met Pro Gln Asn Lys Gln Ser Phe Gln Tyr Arg Met		
35	40	45
Trp Gln Phe Val Val Ser Pro Pro Phe Glu Tyr Thr Ile Met Ala		
50	55	60
Met Ile Ala Leu Asn Thr Ile Val Leu Met Met Lys Phe Tyr Gly		
65	70	75
Ala Ser Val Ala Tyr Glu Asn Ala Leu Arg Val Phe Asn Ile Val		
80	85	90
Phe Thr Ser Leu Phe Ser Leu Glu Cys Val Leu Lys Val Met Ala		
95	100	105
Phe Gly Ile Leu Asn Tyr Phe Arg Asp Ala Trp Asn Ile Phe Asp		
110	115	120
Phe Val Thr Val Leu Gly Ser Ile Thr Asp Ile Leu Val Thr Glu		
125	130	135
Phe Gly Asn Asn Phe Ile Asn Leu Ser Phe Leu Arg Leu Phe Arg		
140	145	150
Ala Ala Arg Leu Ile Lys Leu Leu Arg Gln Gly Tyr Thr Ile Arg		
155	160	165
Ile Leu Leu Trp Thr Phe Val Gln Ser Phe Lys Ala Leu Pro Tyr		
170	175	180
Val Cys Leu Leu Ile Ala Met Leu Phe Phe Ile Tyr Ala Ile Ile		
185	190	195
Gly Met Gln Val Phe Gly Asn Ile Gly Ile Asp Val Glu Asp Glu		
200	205	210

Asp Ser Asp Glu Asp Glu Phe Gln Ile Thr Glu His Asn Asn Phe	215	220	225
Arg Thr Phe Phe Gln Ala Leu Met Leu Leu Phe Arg Ser Ala Thr	230	235	240
Gly Glu Ala Trp His Asn Ile Met Leu Ser Cys Leu Ser Gly Lys	245	250	255
Pro Cys Asp Lys Asn Ser Gly Ile Leu Thr Arg Glu Cys Gly Asn	260	265	270
Glu Phe Ala Tyr Phe Tyr Phe Val Ser Phe Ile Phe Leu Cys Ser	275	280	285
Phe Leu Met Leu Asn Leu Phe Val Ala Val Ile Met Asp Asn Phe	290	295	300
Glu Tyr Leu Thr Arg Asp Ser Ser Ile Leu Gly Pro His His Leu	305	310	315
Asp Glu Tyr Val Arg Val Trp Ala Glu Tyr Asp Pro Ala Ala Cys	320	325	330
Gly Arg Ile His Tyr Lys Asp Met Tyr Ser Leu Leu Arg Val Ile	335	340	345
Ser Pro Pro Leu Gly Leu Gly Lys Lys Cys Pro His Arg Val Ala	350	355	360
Cys Lys Arg Leu Leu Arg Met Asp Leu Pro Val Ala Asp Asp Asn	365	370	375
Thr Val His Phe Asn Ser Thr Leu Met Ala Leu Ile Arg Thr Ala	380	385	390
Leu Asp Ile Lys Ile Ala Lys Gly Gly Ala Asp Lys Gln Gln Met	395	400	405
Asp Ala Glu Leu Arg Lys Glu Met Met Ala Ile Trp Pro Asn Leu	410	415	420
Ser Gln Lys Thr Leu Asp Leu Leu Val Thr Pro His Lys Ser Thr	425	430	435
Asp Leu Thr Val Gly Lys Ile Tyr Ala Ala Met Met Ile Met Glu	440	445	450
Tyr Tyr Arg Gln Ser Lys Ala Lys Lys Leu Gln Ala Met Arg Glu	455	460	465
Glu Gln Asp Arg Thr Pro Leu Met Phe Gln Arg Met Glu Pro Pro	470	475	480
Ser Pro Thr Gln Glu Gly Gly Pro Gly Gln Asn Ala Leu Pro Ser	485	490	495
Thr Gln Leu Asp Pro Gly Gly Ala Leu Met Ala His Glu Ser Gly			

	500	505	510
Leu Lys Glu Ser	Pro Ser Trp Val Thr	Gln Arg Ala Gln Glu	Met
	515	520	525
Phe Gln Lys Thr	Gly Thr Trp Ser Pro	Glu Gln Gly Pro Pro	Thr
	530	535	540
Asp Met Pro Asn	Ser Gln Pro Asn Ser	Gln Ser Val Glu Met	Arg
	545	550	555
Glu Met Gly Arg	Asp Gly Tyr Ser Asp	Ser Glu His Tyr Leu	Pro
	560	565	570
Met Glu Gly Gln	Gly Arg Ala Ala Ser	Met Pro Arg Leu Pro	Ala
	575	580	585
Glu Asn Gln Thr	Ile Ser Asp Thr Ser	Pro Met Lys Arg Ser	Ala
	590	595	600
Ser Val Leu Gly	Pro Lys Ala Arg Arg	Leu Asp Asp Tyr Ser	Leu
	605	610	615
Glu Arg Val Pro	Pro Glu Glu Asn Gln	Arg His His Gln Arg	Arg
	620	625	630
Arg Asp Arg Ser	His Arg Ala Ser Glu	Arg Ser Leu Gly Arg	Tyr
	635	640	645
Thr Asp Val Asp	Thr Gly Leu Gly Thr	Asp Leu Ser Met Thr	Thr
	650	655	660
Gln Ser Gly Asp	Leu Pro Ser Lys Glu	Arg Asp Gln Glu Arg	Gly
	665	670	675
Arg Pro Lys Asp	Arg Lys His Arg Gln	His His His His His	His
	680	685	690
His His His His	Pro Pro Pro Pro Asp	Lys Asp Arg Tyr Ala	Gln
	695	700	705
Glu Arg Pro Asp	His Gly Arg Ala Arg	Ala Arg Asp Gln Arg	Trp
	710	715	720
Ser Arg Ser Pro	Ser Glu Gly Arg Glu	His Met Ala His Arg	Gln
	725	730	735
Gly Ser Ser Ser	Val Ser Gly Ser Pro	Ala Pro Ser Thr Ser	Gly
	740	745	750
Thr Ser Thr Pro	Arg Arg Gly Arg Arg	Gln Leu Pro Gln Thr	Pro
	755	760	765
Ser Thr Pro Arg	Pro His Val Ser Tyr	Ser Pro Val Ile Arg	Lys
	770	775	780
Ala Gly Gly Ser	Gly Pro Pro Gln Gln	Gln Gln Gln Gln Gln	Gln
	785	790	795

Gln Gln Gln Gln Ala Val Ala Arg Pro Gly Arg Ala Ala Thr Ser  
 800 805 810  
 Gly Pro Arg Arg Tyr Pro Gly Pro Thr Ala Glu Pro Leu Ala Gly  
 815 820 825  
 Asp Arg Pro Pro Thr Gly Gly His Ser Ser Gly Arg Ser Pro Arg  
 830 835 840  
 Met Glu Arg Arg Val Pro Gly Pro Ala Arg Ser Glu Ser Pro Arg  
 845 850 855  
 Ala Cys Arg His Gly Gly Ala Arg Trp Pro Ala Ser Gly Pro His  
 860 865 870  
 Val Ser Glu Gly Pro Pro Gly Pro Arg His His Gly Tyr Tyr Arg  
 875 880 885  
 Gly Ser Asp Tyr Asp Glu Ala Asp Gly Pro Gly Ser Gly Gly Gly  
 890 895 900  
 Glu Glu Ala Met Ala Gly Ala Tyr Asp Ala Pro Pro Pro Val Arg  
 905 910 915  
 His Ala Ser Ser Gly Ala Thr Gly Arg Ser Pro Arg Thr Pro Arg  
 920 925 930  
 Ala Ser Gly Pro Ala Cys Ala Ser Pro Ser Arg His Gly Arg Arg  
 935 940 945  
 Leu Pro Asn Gly Tyr Tyr Pro Ala His Gly Leu Ala Arg Pro Arg  
 950 955 960  
 Gly Pro Gly Ser Arg Lys Gly Leu His Glu Pro Tyr Ser Glu Ser  
 965 970 975  
 Asp Asp Asp Trp Cys Asn  
 980

<210> 151  
 <211> 996  
 <212> PRT  
 <213> Homo sapien

<400> 151  
 Met Arg Pro Val Ala Leu Leu Leu Leu Pro Ser Leu Leu Ala Leu  
 1 5 10 15  
 Leu Ala His Gly Leu Ser Leu Glu Ala Pro Thr Val Gly Lys Gly  
 20 25 30  
 Gln Ala Pro Gly Ile Glu Glu Thr Asp Gly Glu Leu Thr Ala Ala  
 35 40 45  
 Pro Thr Pro Glu Gln Pro Glu Arg Gly Val His Phe Val Thr Thr  
 50 55 60  
 Ala Pro Thr Leu Lys Leu Leu Asn His His Pro Leu Leu Glu Glu

65					70					75				
Phe	Leu	His	Glu	Gly	Leu	Glu	Lys	Gly	Asp	Glu	Glu	Leu	Arg	Pro
			80						85					90
Ala	Leu	Ser	Phe	Gln	Pro	Asp	Pro	Pro	Ala	Pro	Phe	Thr	Pro	Ser
			95						100					105
Pro	Leu	Pro	Arg	Leu	Ala	Asn	Gln	Asp	Ser	Arg	Pro	Val	Phe	Thr
			110						115					120
Ser	Pro	Thr	Pro	Ala	Met	Ala	Ala	Val	Pro	Thr	Gln	Pro	Gln	Ser
			125						130					135
Lys	Glu	Gly	Pro	Trp	Ser	Pro	Asp	Pro	Glu	Ser	Glu	Ser	Pro	Met
			140						145					150
Leu	Arg	Ile	Thr	Ala	Pro	Leu	Pro	Pro	Gly	Pro	Ser	Met	Ala	Val
			155						160					165
Pro	Thr	Leu	Gly	Pro	Gly	Glu	Ile	Ala	Ser	Thr	Thr	Pro	Pro	Ser
			170						175					180
Arg	Ala	Trp	Thr	Pro	Thr	Gln	Glu	Gly	Pro	Gly	Asp	Met	Gly	Arg
			185						190					195
Pro	Trp	Val	Ala	Glu	Val	Val	Ser	Gln	Gly	Ala	Gly	Ile	Gly	Ile
			200						205					210
Gln	Gly	Thr	Ile	Thr	Ser	Ser	Thr	Ala	Ser	Gly	Asp	Asp	Glu	Glu
			215						220					225
Thr	Thr	Thr	Thr	Thr	Thr	Ile	Ile	Thr	Thr	Thr	Ile	Thr	Thr	Val
			230						235					240
Gln	Thr	Pro	Gly	Pro	Cys	Ser	Trp	Asn	Phe	Ser	Gly	Pro	Glu	Gly
			245						250					255
Ser	Leu	Asp	Ser	Pro	Thr	Asp	Leu	Ser	Ser	Pro	Thr	Asp	Val	Gly
			260						265					270
Leu	Asp	Cys	Phe	Phe	Tyr	Ile	Ser	Val	Tyr	Pro	Gly	Tyr	Gly	Val
			275						280					285
Glu	Ile	Lys	Val	Lys	Asn	Ile	Ser	Leu	Arg	Glu	Gly	Glu	Thr	Val
			290						295					300
Thr	Val	Glu	Gly	Leu	Gly	Gly	Pro	Asp	Pro	Leu	Pro	Leu	Ala	Asn
			305						310					315
Gln	Ser	Phe	Leu	Leu	Arg	Gly	Gln	Val	Ile	Arg	Ser	Pro	Thr	His
			320						325					330
Gln	Ala	Ala	Leu	Arg	Phe	Gln	Ser	Leu	Pro	Pro	Pro	Ala	Gly	Pro
			335						340					345
Gly	Thr	Phe	His	Phe	His	Tyr	Gln	Ala	Tyr	Leu	Leu	Ser	Cys	His
			350						355					360

Phe	Pro	Arg	Arg	Pro	Ala	Tyr	Gly	Asp	Val	Thr	Val	Thr	Ser	Leu	365	370	375
His	Pro	Gly	Gly	Ser	Ala	Arg	Phe	His	Cys	Ala	Thr	Gly	Tyr	Gln	380	385	390
Leu	Lys	Gly	Ala	Arg	His	Leu	Thr	Cys	Leu	Asn	Ala	Thr	Gln	Pro	395	400	405
Phe	Trp	Asp	Ser	Lys	Glu	Pro	Val	Cys	Ile	Gly	Glu	Cys	Pro	Gly	410	415	420
Val	Ile	Arg	Asn	Ala	Thr	Thr	Gly	Arg	Ile	Val	Ser	Pro	Gly	Phe	425	430	435
Pro	Gly	Asn	Tyr	Ser	Asn	Asn	Leu	Thr	Cys	His	Trp	Leu	Leu	Glu	440	445	450
Ala	Pro	Glu	Gly	Gln	Arg	Leu	His	Leu	His	Phe	Glu	Lys	Val	Ser	455	460	465
Leu	Ala	Glu	Asp	Asp	Asp	Arg	Leu	Ile	Ile	Arg	Asn	Gly	Asp	Asn	470	475	480
Val	Glu	Ala	Pro	Pro	Val	Tyr	Asp	Ser	Tyr	Glu	Val	Glu	Tyr	Leu	485	490	495
Pro	Ile	Glu	Gly	Leu	Leu	Ser	Ser	Gly	Lys	His	Phe	Phe	Val	Glu	500	505	510
Leu	Ser	Thr	Asp	Ser	Ser	Gly	Ala	Ala	Ala	Gly	Met	Ala	Leu	Arg	515	520	525
Tyr	Glu	Ala	Phe	Gln	Gln	Gly	His	Cys	Tyr	Glu	Pro	Phe	Val	Lys	530	535	540
Tyr	Gly	Asn	Phe	Ser	Ser	Ser	Thr	Pro	Thr	Tyr	Pro	Val	Gly	Thr	545	550	555
Thr	Val	Glu	Phe	Ser	Cys	Asp	Pro	Gly	Tyr	Thr	Leu	Glu	Gln	Gly	560	565	570
Ser	Ile	Ile	Ile	Glu	Cys	Val	Asp	Pro	His	Asp	Pro	Gln	Trp	Asn	575	580	585
Glu	Thr	Glu	Pro	Ala	Cys	Arg	Ala	Val	Cys	Ser	Gly	Glu	Ile	Thr	590	595	600
Asp	Ser	Ala	Gly	Val	Val	Leu	Ser	Pro	Asn	Trp	Pro	Glu	Pro	Tyr	605	610	615
Gly	Arg	Gly	Gln	Asp	Cys	Ile	Trp	Gly	Val	His	Val	Glu	Glu	Asp	620	625	630
Lys	Arg	Ile	Met	Leu	Asp	Ile	Arg	Val	Leu	Arg	Ile	Gly	Pro	Gly	635	640	645
Asp	Val	Leu	Thr	Phe	Tyr	Asp	Gly	Asp	Asp	Leu	Thr	Ala	Arg	Val			



Leu Gly Gln Tyr Ser Gly Pro Arg Ser His Phe Lys Leu Phe Thr	650	655	660
665	670	675	
Ser Met Ala Asp Val Thr Ile Gln Phe Gln Ser Asp Pro Gly Thr	680	685	690
Ser Val Leu Gly Tyr Gln Gln Gly Phe Val Ile His Phe Phe Glu	695	700	705
Val Pro Arg Asn Asp Thr Cys Pro Glu Leu Pro Glu Ile Pro Asn	710	715	720
Gly Trp Lys Ser Pro Ser Gln Pro Glu Leu Val His Gly Thr Val	725	730	735
Val Thr Tyr Gln Cys Tyr Pro Gly Tyr Gln Val Val Gly Ser Ser	740	745	750
Val Leu Met Cys Gln Trp Asp Leu Thr Trp Ser Glu Asp Leu Pro	755	760	765
Ser Cys Gln Arg Val Thr Ser Cys His Asp Pro Gly Asp Val Glu	770	775	780
His Ser Arg Arg Leu Ile Ser Ser Pro Lys Phe Pro Val Gly Ala	785	790	795
Thr Val Gln Tyr Ile Cys Asp Gln Gly Phe Val Leu Met Gly Ser	800	805	810
Ser Ile Leu Thr Cys His Asp Arg Gln Ala Gly Ser Pro Lys Trp	815	820	825
Ser Asp Arg Ala Pro Lys Cys Leu Leu Glu Gln Leu Lys Pro Cys	830	835	840
His Gly Leu Ser Ala Pro Glu Asn Gly Ala Arg Ser Pro Glu Lys	845	850	855
Gln Leu His Pro Ala Gly Ala Thr Ile His Phe Ser Cys Ala Pro	860	865	870
Gly Tyr Val Leu Lys Gly Gln Ala Ser Ile Lys Cys Val Pro Gly	875	880	885
His Pro Ser His Trp Ser Asp Pro Pro Pro Ile Cys Arg Ala Ala	890	895	900
Ser Leu Asp Gly Ser Thr Thr Val Ala Ala Trp Met Val Ala Lys	905	910	915
Ala Pro Ala Ala Ser Ser Thr Leu Asp Ala Ala His Ile Ala Ala	920	925	930
Ala Ile Phe Leu Pro Leu Val Ala Met Val Leu Leu Val Gly Gly	935	940	945

Val Tyr Phe Tyr Phe Ser Arg Leu Gln Gly Lys Ser Ser Leu Gln  
 950 955 960

Leu Pro Arg Pro Arg Pro Arg Pro Tyr Asn Arg Ile Thr Ile Glu  
 965 970 975

Ser Ala Phe Asp Asn Pro Thr Tyr Glu Thr Gly Ser Leu Ser Phe  
 980 985 990

Ala Gly Asp Glu Arg Ile  
 995

<210> 152

<211> 844

<212> PRT

<213> Homo sapien

<400> 152

Met Val Gln Lys Ser Arg Asn Gly Gly Val Tyr Pro Gly Pro Ser  
 1 5 10 15

Gly Glu Lys Lys Leu Lys Val Gly Phe Val Gly Leu Asp Pro Gly  
 20 25 30

Ala Pro Asp Ser Thr Arg Asp Gly Ala Leu Leu Ile Ala Gly Ser  
 35 40 45

Glu Ala Pro Lys Arg Gly Ser Ile Leu Ser Lys Pro Arg Ala Gly  
 50 55 60

Gly Ala Gly Ala Gly Lys Pro Pro Lys Arg Asn Ala Phe Tyr Arg  
 65 70 75

Lys Leu Gln Asn Phe Leu Tyr Asn Val Leu Glu Arg Pro Arg Gly  
 80 85 90

Trp Ala Phe Ile Tyr His Ala Tyr Val Phe Leu Leu Val Phe Ser  
 95 100 105

Cys Leu Val Leu Ser Val Phe Ser Thr Ile Lys Glu Tyr Glu Lys  
 110 115 120

Ser Ser Glu Gly Ala Leu Tyr Ile Leu Glu Ile Val Thr Ile Val  
 125 130 135

Val Phe Gly Val Glu Tyr Phe Val Arg Ile Trp Ala Ala Gly Cys  
 140 145 150

Cys Cys Arg Tyr Arg Gly Trp Arg Gly Arg Leu Lys Phe Ala Arg  
 155 160 165

Lys Pro Phe Cys Val Ile Asp Ile Met Val Leu Ile Ala Ser Ile  
 170 175 180

Ala Val Leu Ala Ala Gly Ser Gln Gly Asn Val Phe Ala Thr Ser  
 185 190 195

Ala Leu Arg Ser Leu Arg Phe Leu Gln Ile Leu Arg Met Ile Arg

200	205	210
Met Asp Arg Arg Gly Gly Thr Trp Lys	Leu Leu Gly Ser Val Val	
215	220	225
Tyr Ala His Ser Lys Glu Leu Val Thr	Ala Trp Tyr Ile Gly Phe	
230	235	240
Leu Cys Leu Ile Leu Ala Ser Phe Leu	Val Tyr Leu Ala Glu Lys	
245	250	255
Gly Glu Asn Asp His Phe Asp Thr Tyr	Ala Asp Ala Leu Trp Trp	
260	265	270
Gly Leu Ile Thr Leu Thr Thr Ile Gly	Tyr Gly Asp Lys Tyr Pro	
275	280	285
Gln Thr Trp Asn Gly Arg Leu Leu Ala	Ala Thr Phe Thr Leu Ile	
290	295	300
Gly Val Ser Phe Phe Ala Leu Pro Ala	Gly Ile Leu Gly Ser Gly	
305	310	315
Phe Ala Leu Lys Val Gln Glu Gln His	Arg Gln Lys His Phe Glu	
320	325	330
Lys Arg Arg Asn Pro Ala Ala Gly Leu	Ile Gln Ser Ala Trp Arg	
335	340	345
Phe Tyr Ala Thr Asn Leu Ser Arg Thr	Asp Leu His Ser Thr Trp	
350	355	360
Gln Tyr Tyr Glu Arg Thr Val Thr Val	Pro Met Tyr Arg Leu Ile	
365	370	375
Pro Pro Leu Asn Gln Leu Glu Leu Leu	Arg Asn Leu Lys Ser Lys	
380	385	390
Ser Gly Leu Ala Phe Arg Lys Asp Pro	Pro Pro Glu Pro Ser Pro	
395	400	405
Ser Gln Lys Val Ser Leu Lys Asp Arg	Val Phe Ser Ser Pro Arg	
410	415	420
Gly Val Ala Ala Lys Gly Lys Gly Ser	Pro Gln Ala Gln Thr Val	
425	430	435
Arg Arg Ser Pro Ser Ala Asp Gln Ser	Leu Glu Asp Ser Pro Ser	
440	445	450
Lys Val Pro Lys Ser Trp Ser Phe Gly	Asp Arg Ser Arg Ala Arg	
455	460	465
Gln Ala Phe Arg Ile Lys Gly Ala Ala	Ser Arg Gln Asn Ser Glu	
470	475	480
Glu Ala Ser Leu Pro Gly Glu Asp Ile	Val Asp Asp Lys Ser Cys	
485	490	495

Pro Cys Glu Phe Val Thr Glu Asp Leu Thr Pro Gly Leu Lys Val	500	505	510
Ser Ile Arg Ala Val Cys Val Met Arg Phe Leu Val Ser Lys Arg	515	520	525
Lys Phe Lys Glu Ser Leu Arg Pro Tyr Asp Val Met Asp Val Ile	530	535	540
Glu Gln Tyr Ser Ala Gly His Leu Asp Met Leu Ser Arg Ile Lys	545	550	555
Ser Leu Gln Ser Arg Val Asp Gln Ile Val Gly Arg Gly Pro Ala	560	565	570
Ile Thr Asp Lys Asp Arg Thr Lys Gly Pro Ala Glu Ala Glu Leu	575	580	585
Pro Glu Asp Pro Ser Met Met Gly Arg Leu Gly Lys Val Glu Lys	590	595	600
Gln Val Leu Ser Met Glu Lys Lys Leu Asp Phe Leu Val Asn Ile	605	610	615
Tyr Met Gln Arg Met Gly Ile Pro Pro Thr Glu Thr Glu Ala Tyr	620	625	630
Phe Gly Ala Lys Glu Pro Glu Pro Ala Pro Pro Tyr His Ser Pro	635	640	645
Glu Asp Ser Arg Glu His Val Asp Arg His Gly Cys Ile Val Lys	650	655	660
Ile Val Arg Ser Ser Ser Ser Thr Gly Gln Lys Asn Phe Ser Ala	665	670	675
Pro Pro Ala Ala Pro Pro Val Gln Cys Pro Pro Ser Thr Ser Trp	680	685	690
Gln Pro Gln Ser His Pro Arg Gln Gly His Gly Thr Ser Pro Val	695	700	705
Gly Asp His Gly Ser Leu Val Arg Ile Pro Pro Pro Pro Ala His	710	715	720
Glu Arg Ser Leu Ser Ala Tyr Gly Gly Gly Asn Arg Ala Ser Met	725	730	735
Glu Phe Leu Arg Gln Glu Asp Thr Pro Gly Cys Arg Pro Pro Glu	740	745	750
Gly Thr Leu Arg Asp Ser Asp Thr Ser Ile Ser Ile Pro Ser Val	755	760	765
Asp His Glu Glu Leu Glu Arg Ser Phe Ser Gly Phe Ser Ile Ser	770	775	780
Gln Ser Lys Glu Asn Leu Asp Ala Leu Asn Ser Cys Tyr Ala Ala			

785					790					795				
Val	Ala	Pro	Cys	Ala	Lys	Val	Arg	Pro	Tyr	Ile	Ala	Glu	Gly	Glu
				800					805					810
Ser	Asp	Thr	Asp	Ser	Asp	Leu	Cys	Thr	Pro	Cys	Gly	Pro	Pro	Pro
				815					820					825
Arg	Ser	Ala	Thr	Gly	Glu	Gly	Pro	Phe	Gly	Asp	Val	Gly	Trp	Ala
				830					835					840
Gly Pro Arg Lys														

<210> 153  
 <211> 415  
 <212> PRT  
 <213> Homo sapien

<400> 153

Met	Val	Phe	Ala	His	Arg	Met	Asp	Asn	Ser	Lys	Pro	His	Leu	Ile
1				5					10					15
Ile	Pro	Thr	Leu	Leu	Val	Pro	Leu	Gln	Asn	Arg	Ser	Cys	Thr	Glu
			20						25					30
Thr	Ala	Thr	Pro	Leu	Pro	Ser	Gln	Tyr	Leu	Met	Glu	Leu	Ser	Glu
			35						40					45
Glu	His	Ser	Trp	Met	Ser	Asn	Gln	Thr	Asp	Leu	His	Tyr	Val	Leu
			50						55					60
Lys	Pro	Gly	Glu	Val	Ala	Thr	Ala	Ser	Ile	Phe	Phe	Gly	Ile	Leu
			65						70					75
Trp	Leu	Phe	Ser	Ile	Phe	Gly	Asn	Ser	Leu	Val	Cys	Leu	Val	Ile
			80						85					90
His	Arg	Ser	Arg	Arg	Thr	Gln	Ser	Thr	Thr	Asn	Tyr	Phe	Val	Val
			95						100					105
Ser	Met	Ala	Cys	Ala	Asp	Leu	Leu	Ile	Ser	Val	Ala	Ser	Thr	Pro
			110						115					120
Phe	Val	Leu	Leu	Gln	Phe	Thr	Thr	Gly	Arg	Trp	Thr	Leu	Gly	Ser
			125						130					135
Ala	Thr	Cys	Lys	Val	Val	Arg	Tyr	Phe	Gln	Tyr	Leu	Thr	Pro	Gly
			140						145					150
Val	Gln	Ile	Tyr	Val	Leu	Leu	Ser	Ile	Cys	Ile	Asp	Arg	Phe	Tyr
			155						160					165
Thr	Ile	Val	Tyr	Pro	Leu	Ser	Phe	Lys	Val	Ser	Arg	Glu	Lys	Ala
			170						175					180
Lys	Lys	Met	Ile	Ala	Ala	Ser	Trp	Ile	Phe	Asp	Ala	Gly	Phe	Val
			185						190					195

Thr	Pro	Val	Leu	Phe	Phe	Tyr	Gly	Ser	Asn	Trp	Asp	Ser	His	Cys	
				200					205					210	
Asn	Tyr	Phe	Leu	Pro	Ser	Ser	Trp	Glu	Gly	Thr	Ala	Tyr	Thr	Val	
				215					220					225	
Ile	His	Phe	Leu	Val	Gly	Phe	Val	Ile	Pro	Ser	Val	Leu	Ile	Ile	
				230					235					240	
Leu	Phe	Tyr	Gln	Lys	Val	Ile	Lys	Tyr	Ile	Trp	Arg	Ile	Gly	Thr	
				245					250					255	
Asp	Gly	Arg	Thr	Val	Arg	Arg	Thr	Met	Asn	Ile	Val	Pro	Arg	Thr	
				260					265					270	
Lys	Val	Lys	Thr	Ile	Lys	Met	Phe	Leu	Ile	Leu	Asn	Leu	Leu	Phe	
				275					280					285	
Leu	Leu	Ser	Trp	Leu	Pro	Phe	His	Val	Ala	Gln	Leu	Trp	His	Pro	
				290					295					300	
His	Glu	Gln	Asp	Tyr	Lys	Lys	Ser	Ser	Leu	Val	Phe	Thr	Ala	Ile	
				305					310					315	
Thr	Trp	Ile	Ser	Phe	Ser	Ser	Ser	Ala	Ser	Lys	Pro	Thr	Leu	Tyr	
				320					325					330	
Ser	Ile	Tyr	Asn	Ala	Asn	Phe	Arg	Arg	Gly	Met	Lys	Glu	Thr	Phe	
				335					340					345	
Cys	Met	Ser	Ser	Met	Lys	Cys	Tyr	Arg	Ser	Asn	Ala	Tyr	Thr	Ile	
				350					355					360	
Thr	Thr	Ser	Ser	Arg	Met	Ala	Lys	Lys	Asn	Tyr	Val	Gly	Ile	Ser	
				365					370					375	
Glu	Ile	Pro	Ser	Met	Ala	Lys	Thr	Ile	Thr	Lys	Asp	Ser	Ile	Tyr	
				380					385					390	
Asp	Ser	Phe	Asp	Arg	Glu	Ala	Lys	Glu	Lys	Lys	Leu	Ala	Trp	Pro	
				395					400					405	
Ile	Asn	Ser	Asn	Pro	Pro	Asn	Thr	Phe	Val						
				410					415						

<210> 154  
 <211> 842  
 <212> PRT  
 <213> Homo sapien

<400> 154  
 Met Ala Val Arg Pro Gly Leu Trp Pro Ala Leu Leu Gly Ile Val  
 1 5 10 15  
 Leu Ala Ala Trp Leu Arg Gly Ser Gly Ala Gln Gln Ser Ala Thr  
 20 25 30  
 Val Ala Asn Pro Val Pro Gly Ala Asn Pro Asp Leu Leu Pro His

	35	40	45
Phe Leu Val Glu Pro Glu Asp Val Tyr Ile Val Lys Asn Lys Pro	50	55	60
Val Leu Leu Val Cys Lys Ala Val Pro Ala Thr Gln Ile Phe Phe	65	70	75
Lys Cys Asn Gly Glu Trp Val Arg Gln Val Asp His Val Ile Glu	80	85	90
Arg Ser Thr Asp Gly Ser Ser Gly Leu Pro Thr Met Glu Val Arg	95	100	105
Ile Asn Val Ser Arg Gln Gln Val Glu Lys Val Phe Gly Leu Glu	110	115	120
Glu Tyr Trp Cys Gln Cys Val Ala Trp Ser Ser Ser Gly Thr Thr	125	130	135
Lys Ser Gln Lys Ala Tyr Ile Arg Ile Ala Tyr Leu Arg Lys Asn	140	145	150
Phe Glu Gln Glu Pro Leu Ala Lys Glu Val Ser Leu Glu Gln Gly	155	160	165
Ile Val Leu Pro Cys Arg Pro Pro Glu Gly Ile Pro Pro Ala Glu	170	175	180
Val Glu Trp Leu Arg Asn Glu Asp Leu Val Asp Pro Ser Leu Asp	185	190	195
Pro Asn Val Tyr Ile Thr Arg Glu His Ser Leu Val Val Arg Gln	200	205	210
Ala Arg Leu Ala Asp Thr Ala Asn Tyr Thr Cys Val Ala Lys Asn	215	220	225
Ile Val Ala Arg Arg Arg Ser Ala Ser Ala Ala Val Ile Val Tyr	230	235	240
Val Asp Gly Ser Trp Ser Pro Trp Ser Lys Trp Ser Ala Cys Gly	245	250	255
Leu Asp Cys Thr His Trp Arg Ser Arg Glu Cys Ser Asp Pro Ala	260	265	270
Pro Arg Asn Gly Gly Glu Glu Cys Gln Gly Thr Asp Leu Asp Thr	275	280	285
Arg Asn Cys Thr Ser Asp Leu Cys Val His Thr Ala Ser Gly Pro	290	295	300
Glu Asp Val Ala Leu Tyr Val Gly Leu Ile Ala Val Ala Val Cys	305	310	315
Leu Val Leu Leu Leu Leu Val Leu Ile Leu Val Tyr Cys Arg Lys	320	325	330

Lys Glu Gly Leu Asp Ser Asp Val Ala Asp Ser Ser Ile Leu Thr	335	340	345
Ser Gly Phe Gln Pro Val Ser Ile Lys Pro Ser Lys Ala Asp Asn	350	355	360
Pro His Leu Leu Thr Ile Gln Pro Asp Leu Ser Thr Thr Thr Thr	365	370	375
Thr Tyr Gln Gly Ser Leu Cys Pro Arg Gln Asp Gly Pro Ser Pro	380	385	390
Lys Phe Gln Leu Thr Asn Gly His Leu Leu Ser Pro Leu Gly Gly	395	400	405
Gly Arg His Thr Leu His His Ser Ser Pro Thr Ser Glu Ala Glu	410	415	420
Glu Phe Val Ser Arg Leu Ser Thr Gln Asn Tyr Phe Arg Ser Leu	425	430	435
Pro Arg Gly Thr Ser Asn Met Thr Tyr Gly Thr Phe Asn Phe Leu	440	445	450
Gly Gly Arg Leu Met Ile Pro Asn Thr Gly Ile Ser Leu Leu Ile	455	460	465
Pro Pro Asp Ala Ile Pro Arg Gly Lys Ile Tyr Glu Ile Tyr Leu	470	475	480
Thr Leu His Lys Pro Glu Asp Val Arg Leu Pro Leu Ala Gly Cys	485	490	495
Gln Thr Leu Leu Ser Pro Ile Val Ser Cys Gly Pro Pro Gly Val	500	505	510
Leu Leu Thr Arg Pro Val Ile Leu Ala Met Asp His Cys Gly Glu	515	520	525
Pro Ser Pro Asp Ser Trp Ser Leu Arg Leu Lys Lys Gln Ser Cys	530	535	540
Glu Gly Ser Trp Glu Asp Val Leu His Leu Gly Glu Glu Ala Pro	545	550	555
Ser His Leu Tyr Tyr Cys Gln Leu Glu Ala Ser Ala Cys Tyr Val	560	565	570
Phe Thr Glu Gln Leu Gly Arg Phe Ala Leu Val Gly Glu Ala Leu	575	580	585
Ser Val Ala Ala Ala Lys Arg Leu Lys Leu Leu Leu Phe Ala Pro	590	595	600
Val Ala Cys Thr Ser Leu Glu Tyr Asn Ile Arg Val Tyr Cys Leu	605	610	615
His Asp Thr His Asp Ala Leu Lys Glu Val Val Gln Leu Glu Lys			



620	625	630
Gln Leu Gly Gly Gln Leu Ile Gln Glu	Pro Arg Val Leu His Phe	
635	640	645
Lys Asp Ser Tyr His Asn Leu Arg Leu	Ser Ile His Asp Val Pro	
650	655	660
Ser Ser Leu Trp Lys Ser Lys Leu Leu	Val Ser Tyr Gln Glu Ile	
665	670	675
Pro Phe Tyr His Ile Trp Asn Gly Thr	Gln Arg Tyr Leu His Cys	
680	685	690
Thr Phe Thr Leu Glu Arg Val Ser Pro	Ser Thr Ser Asp Leu Ala	
695	700	705
Cys Lys Leu Trp Val Trp Gln Val Glu	Gly Asp Gly Gln Ser Phe	
710	715	720
Ser Ile Asn Phe Asn Ile Thr Lys Asp	Thr Arg Phe Ala Glu Leu	
725	730	735
Leu Ala Leu Glu Ser Glu Ala Gly Val	Pro Ala Leu Val Gly Pro	
740	745	750
Ser Ala Phe Lys Ile Pro Phe Leu Ile	Arg Gln Lys Ile Ile Ser	
755	760	765
Ser Leu Asp Pro Pro Cys Arg Arg Gly	Ala Asp Trp Arg Thr Leu	
770	775	780
Ala Gln Lys Leu His Leu Asp Ser His	Leu Ser Phe Phe Ala Ser	
785	790	795
Lys Pro Ser Pro Thr Ala Met Ile Leu	Asn Leu Trp Glu Ala Arg	
800	805	810
His Phe Pro Asn Gly Asn Leu Ser Gln	Leu Ala Ala Ala Val Ala	
815	820	825
Gly Leu Gly Gln Pro Asp Ala Gly Leu	Phe Thr Val Ser Glu Ala	
830	835	840

Glu Cys

<210> 155  
 <211> 1366  
 <212> PRT  
 <213> Homo sapien

<400> 155  
 Met Ala Gln Ala Leu Leu Val Pro Pro Gly Pro Glu Ser Phe Arg  
 1 5 10 15  
 Leu Phe Thr Arg Glu Ser Leu Ala Ala Ile Glu Lys Arg Ala Ala  
 20 25 30

Glu	Glu	Lys	Ala	Lys	Lys	Pro	Lys	Lys	Glu	Gln	Asp	Asn	Asp	Asp		35	40	45
Glu	Asn	Lys	Pro	Lys	Pro	Asn	Ser	Asp	Leu	Glu	Ala	Gly	Lys	Asn		50	55	60
Leu	Pro	Phe	Ile	Tyr	Gly	Asp	Ile	Pro	Pro	Glu	Met	Val	Ser	Glu		65	70	75
Pro	Leu	Glu	Asp	Leu	Asp	Pro	Tyr	Tyr	Ile	Asn	Lys	Lys	Thr	Phe		80	85	90
Ile	Val	Met	Asn	Lys	Gly	Lys	Ala	Ile	Phe	Arg	Phe	Ser	Ala	Thr		95	100	105
Ser	Ala	Leu	Tyr	Ile	Leu	Thr	Pro	Leu	Asn	Pro	Val	Arg	Lys	Ile		110	115	120
Ala	Ile	Lys	Ile	Leu	Val	His	Ser	Leu	Phe	Ser	Met	Leu	Ile	Met		125	130	135
Cys	Thr	Ile	Leu	Thr	Asn	Cys	Val	Phe	Met	Thr	Leu	Ser	Asn	Pro		140	145	150
Pro	Asp	Trp	Thr	Lys	Asn	Val	Glu	Tyr	Thr	Phe	Thr	Gly	Ile	Tyr		155	160	165
Thr	Phe	Glu	Ser	Leu	Ile	Lys	Ile	Leu	Val	Arg	Gly	Phe	Cys	Leu		170	175	180
Glu	Asp	Phe	Thr	Phe	Leu	Arg	Asp	Pro	Trp	Asn	Trp	Leu	Asp	Phe		185	190	195
Ser	Val	Ile	Val	Met	Ala	Tyr	Val	Thr	Glu	Phe	Val	Ser	Leu	Gly		200	205	210
Asn	Val	Ser	Ala	Leu	Arg	Thr	Phe	Arg	Val	Leu	Arg	Ala	Leu	Lys		215	220	225
Thr	Ile	Ser	Val	Ile	Pro	Gly	Leu	Lys	Thr	Ile	Val	Gly	Ala	Leu		230	235	240
Ile	Gln	Ser	Val	Lys	Lys	Leu	Ser	Asp	Val	Met	Ile	Leu	Thr	Val		245	250	255
Phe	Cys	Leu	Ser	Val	Phe	Ala	Leu	Ile	Gly	Leu	Gln	Leu	Phe	Met		260	265	270
Gly	Asn	Leu	Arg	Asn	Lys	Cys	Leu	Gln	Trp	Pro	Pro	Ser	Asp	Ser		275	280	285
Ala	Phe	Glu	Thr	Asn	Thr	Thr	Ser	Tyr	Phe	Asn	Gly	Thr	Met	Asp		290	295	300
Ser	Asn	Gly	Thr	Phe	Val	Asn	Val	Thr	Met	Ser	Thr	Phe	Asn	Trp		305	310	315
Lys	Asp	Asn	Ile	Gly	Asp	Asp	Ser	His	Phe	Tyr	Val	Leu	Asp	Gly				

320	325	330
Gln Lys Asp Pro Leu Leu Cys Gly Asn Gly Ser Asp Ala Gly Gln		
335	340	345
Cys Pro Glu Gly Tyr Ile Cys Val Lys Ala Gly Arg Asn Pro Asn		
350	355	360
Tyr Gly Tyr Thr Ser Phe Asp Thr Phe Ser Trp Ala Phe Leu Ser		
365	370	375
Leu Phe Arg Leu Met Thr Gln Asp Tyr Trp Glu Asn Leu Tyr Gln		
380	385	390
Leu Thr Leu Arg Ala Ala Gly Lys Thr Tyr Thr Ile Phe Phe Val		
395	400	405
Leu Val Ile Phe Leu Gly Ser Phe Tyr Leu Val Asn Leu Ile Leu		
410	415	420
Ala Val Val Ala Met Ala Tyr Glu Glu Gln Asn Gln Ala Thr Leu		
425	430	435
Glu Glu Ala Glu Gln Lys Glu Ala Glu Phe Gln Gln Met Leu Glu		
440	445	450
Gln Leu Lys Lys Gln Gln Glu Glu Ala Gln Ala Val Ala Ala Ala		
455	460	465
Ser Ala Ala Ser Arg Asp Phe Ser Gly Ile Gly Gly Leu Gly Glu		
470	475	480
Leu Leu Glu Ser Ser Ser Glu Ala Ser Lys Leu Ser Ser Lys Ser		
485	490	495
Ala Lys Glu Trp Arg Asn Arg Arg Lys Lys Arg Arg Gln Arg Glu		
500	505	510
His Leu Glu Gly Asn Asn Lys Gly Glu Arg Asp Ser Phe Pro Lys		
515	520	525
Ser Glu Ser Glu Asp Ser Val Lys Arg Ser Ser Phe Leu Phe Ser		
530	535	540
Met Asp Gly Asn Arg Leu Thr Ser Asp Lys Lys Phe Cys Ser Pro		
545	550	555
His Gln Ser Leu Leu Ser Ile Arg Gly Ser Leu Phe Ser Pro Arg		
560	565	570
Arg Asn Ser Lys Thr Ser Ile Phe Ser Phe Arg Gly Arg Ala Lys		
575	580	585
Asp Val Gly Ser Glu Asn Asp Phe Ala Asp Asp Glu His Ser Thr		
590	595	600
Phe Glu Asp Ser Glu Thr Arg Arg Asp Ser Leu Phe Glu Pro His		
605	610	615

Arg	His	Gly	Glu	Arg	Arg	Asn	Ser	Asn	Gly	Thr	Thr	Thr	Glu	Thr	620	625	630
Glu	Val	Arg	Lys	Arg	Arg	Leu	Ser	Ser	Tyr	Gln	Ile	Ser	Met	Glu	635	640	645
Met	Leu	Glu	Asp	Ser	Ser	Gly	Arg	Gln	Arg	Ala	Val	Ser	Ile	Ala	650	655	660
Ser	Ile	Leu	Thr	Asn	Thr	Met	Glu	Glu	Leu	Glu	Glu	Ser	Arg	Gln	665	670	675
Lys	Cys	Pro	Pro	Cys	Trp	Tyr	Arg	Phe	Ala	Asn	Val	Phe	Leu	Ile	680	685	690
Trp	Asp	Cys	Cys	Asp	Ala	Trp	Leu	Lys	Val	Lys	His	Leu	Val	Asn	695	700	705
Leu	Ile	Val	Met	Asp	Pro	Phe	Val	Asp	Leu	Ala	Ile	Thr	Ile	Cys	710	715	720
Ile	Val	Leu	Asn	Thr	Leu	Phe	Met	Ala	Met	Glu	His	Tyr	Pro	Met	725	730	735
Thr	Glu	Gln	Phe	Ser	Ser	Val	Leu	Thr	Val	Gly	Asn	Leu	Val	Phe	740	745	750
Thr	Gly	Ile	Phe	Thr	Ala	Glu	Met	Val	Leu	Lys	Ile	Ile	Ala	Met	755	760	765
Asp	Pro	Tyr	Tyr	Tyr	Phe	Gln	Glu	Gly	Trp	Asn	Ile	Phe	Asp	Gly	770	775	780
Ile	Ile	Val	Ser	Leu	Ser	Leu	Met	Glu	Leu	Gly	Leu	Ser	Asn	Val	785	790	795
Glu	Gly	Leu	Ser	Val	Leu	Arg	Ser	Phe	Arg	Leu	Leu	Arg	Val	Phe	800	805	810
Lys	Leu	Ala	Lys	Ser	Trp	Pro	Thr	Leu	Asn	Met	Leu	Ile	Lys	Ile	815	820	825
Ile	Gly	Asn	Ser	Val	Gly	Ala	Leu	Gly	Asn	Leu	Thr	Leu	Val	Leu	830	835	840
Ala	Ile	Ile	Val	Phe	Ile	Phe	Ala	Val	Val	Gly	Met	Gln	Leu	Phe	845	850	855
Gly	Lys	Ser	Tyr	Lys	Glu	Cys	Val	Cys	Lys	Ile	Asn	Asp	Asp	Cys	860	865	870
Thr	Leu	Pro	Arg	Trp	His	Met	Asn	Asp	Phe	Phe	His	Ser	Phe	Leu	875	880	885
Ile	Val	Phe	Arg	Val	Leu	Cys	Gly	Glu	Trp	Ile	Glu	Thr	Met	Trp	890	895	900
Asp	Cys	Met	Glu	Val	Ala	Gly	Gln	Thr	Met	Cys	Leu	Ile	Val	Phe			

905										910					915				
Met	Leu	Val	Met	Val	Ile	Gly	Asn	Leu	Val	Val	Leu	Asn	Leu	Phe					
				920									925						930
Leu	Ala	Leu	Leu	Leu	Ser	Ser	Phe	Ser	Ser	Asp	Asn	Leu	Ala	Ala					
				935									940						945
Thr	Asp	Asp	Asp	Asn	Glu	Met	Asn	Asn	Leu	Gln	Ile	Ala	Val	Gly					
				950									955						960
Arg	Met	Gln	Lys	Gly	Ile	Asp	Tyr	Val	Lys	Asn	Lys	Met	Arg	Glu					
				965									970						975
Cys	Phe	Gln	Lys	Ala	Phe	Phe	Arg	Lys	Pro	Lys	Val	Ile	Glu	Ile					
				980									985						990
His	Glu	Gly	Asn	Lys	Ile	Asp	Ser	Cys	Met	Ser	Asn	Asn	Thr	Gly					
				995					1000					1005					
Ile	Glu	Ile	Ser	Lys	Ala	Leu	Asn	Tyr	Leu	Arg	Asp	Gly	Asn	Gly					
				1010					1015					1020					
Thr	Thr	Ser	Gly	Val	Gly	Thr	Gly	Ser	Ser	Val	Glu	Lys	Tyr	Val					
				1025					1030					1035					
Ile	Asp	Glu	Asn	Asp	Tyr	Met	Ser	Phe	Ile	Asn	Asn	Pro	Ser	Leu					
				1040					1045					1050					
Thr	Val	Thr	Val	Pro	Ile	Ala	Val	Gly	Glu	Ser	Asp	Phe	Glu	Asn					
				1055					1060					1065					
Leu	Asn	Thr	Glu	Glu	Phe	Ser	Ser	Glu	Ser	Glu	Leu	Glu	Glu	Ser					
				1070					1075					1080					
Lys	Glu	Lys	Leu	Asn	Ala	Thr	Ser	Ser	Ser	Glu	Gly	Ser	Thr	Val					
				1085					1090					1095					
Asp	Val	Val	Leu	Pro	Arg	Glu	Gly	Glu	Gln	Ala	Glu	Thr	Glu	Pro					
				1100					1105					1110					
Glu	Glu	Asp	Leu	Lys	Pro	Glu	Ala	Cys	Phe	Thr	Glu	Gly	Cys	Ile					
				1115					1120					1125					
Lys	Lys	Phe	Pro	Phe	Cys	Gln	Val	Ser	Thr	Glu	Glu	Gly	Lys	Gly					
				1130					1135					1140					
Lys	Ile	Trp	Trp	Asn	Leu	Arg	Lys	Thr	Cys	Tyr	Ser	Ile	Val	Glu					
				1145					1150					1155					
His	Asn	Trp	Phe	Glu	Thr	Phe	Ile	Val	Phe	Met	Ile	Leu	Leu	Ser					
				1160					1165					1170					
Ser	Gly	Ala	Leu	Ala	Phe	Glu	Asp	Ile	Tyr	Ile	Glu	Gln	Arg	Lys					
				1175					1180					1185					
Thr	Ile	Lys	Thr	Met	Leu	Glu	Tyr	Ala	Asp	Lys	Val	Phe	Thr	Tyr					
				1190					1195					1200					

Ile Phe Ile Leu Glu Met Leu Leu Lys Trp Val Ala Tyr Gly Phe		
1205	1210	1215
Gln Thr Tyr Phe Thr Asn Ala Trp Cys Arg Leu Asp Phe Leu Ile		
1220	1225	1230
Val Asp Val Ser Leu Val Ser Leu Val Ala Asn Ala Leu Gly Tyr		
1235	1240	1245
Ser Glu Leu Gly Ala Ile Lys Ser Leu Arg Thr Leu Arg Ala Leu		
1250	1255	1260
Arg Pro Leu Arg Ala Leu Ser Arg Phe Glu Gly Met Arg Val Val		
1265	1270	1275
Val Asn Ala Leu Val Gly Ala Ile Pro Ser Ile Met Asn Val Leu		
1280	1285	1290
Leu Val Cys Leu Ile Phe Trp Leu Ile Phe Ser Ile Met Gly Val		
1295	1300	1305
Asn Leu Phe Ala Gly Lys Phe Tyr His Cys Val Asn Met Thr Thr		
1310	1315	1320
Gly Asn Met Phe Asp Ile Ser Asp Val Asn Asn Leu Ser Asp Cys		
1325	1330	1335
Gln Ala Leu Gly Lys Gln Ala Arg Trp Lys Asn Val Lys Val Asn		
1340	1345	1350
Phe Asp Asn Val Gly Ala Gly Tyr Leu Ala Leu Leu Gln Val Val		
1355	1360	1365

Ser

<210> 156  
 <211> 1951  
 <212> PRT  
 <213> Homo sapien

<400> 156

Met Ala Gln Ala Leu Leu Val Pro Pro Gly Pro Glu Ser Phe Arg		
1	5	10
Leu Phe Thr Arg Glu Ser Leu Ala Ala Ile Glu Lys Arg Ala Ala		
20	25	30
Glu Glu Lys Ala Lys Lys Pro Lys Lys Glu Gln Asp Asn Asp Asp		
35	40	45
Glu Asn Lys Pro Lys Pro Asn Ser Asp Leu Glu Ala Gly Lys Asn		
50	55	60
Leu Pro Phe Ile Tyr Gly Asp Ile Pro Pro Glu Met Val Ser Glu		
65	70	75
Pro Leu Glu Asp Leu Asp Pro Tyr Tyr Ile Asn Lys Lys Thr Phe		

80	85	90
Ile Val Met Asn Lys Gly Lys Ala Ile	Phe Arg Phe Ser Ala Thr	
95	100	105
Ser Ala Leu Tyr Ile Leu Thr Pro Leu	Asn Pro Val Arg Lys Ile	
110	115	120
Ala Ile Lys Ile Leu Val His Ser Leu	Phe Ser Met Leu Ile Met	
125	130	135
Cys Thr Ile Leu Thr Asn Cys Val Phe	Met Thr Leu Ser Asn Pro	
140	145	150
Pro Asp Trp Thr Lys Asn Val Glu Tyr	Thr Phe Thr Gly Ile Tyr	
155	160	165
Thr Phe Glu Ser Leu Ile Lys Ile Leu	Ala Arg Gly Phe Cys Leu	
170	175	180
Glu Asp Phe Thr Phe Leu Arg Asp Pro	Trp Asn Trp Leu Asp Phe	
185	190	195
Ser Val Ile Val Met Ala Tyr Val Thr	Glu Phe Val Asp Leu Gly	
200	205	210
Asn Val Ser Ala Leu Arg Thr Phe Arg	Val Leu Arg Ala Leu Lys	
215	220	225
Thr Ile Ser Val Ile Pro Gly Leu Lys	Thr Ile Val Gly Ala Leu	
230	235	240
Ile Gln Ser Val Lys Lys Leu Ser Asp	Val Met Ile Leu Thr Val	
245	250	255
Phe Cys Leu Ser Val Phe Ala Leu Ile	Gly Leu Gln Leu Phe Met	
260	265	270
Gly Asn Leu Arg Asn Lys Cys Leu Gln	Trp Pro Pro Ser Asp Ser	
275	280	285
Ala Phe Glu Thr Asn Thr Thr Ser Tyr	Phe Asn Gly Thr Met Asp	
290	295	300
Ser Asn Gly Thr Phe Val Asn Val Thr	Met Ser Thr Phe Asn Trp	
305	310	315
Lys Asp Tyr Ile Gly Asp Asp Ser His	Phe Tyr Val Leu Asp Gly	
320	325	330
Gln Lys Asp Pro Leu Leu Cys Gly Asn	Gly Ser Asp Ala Gly Gln	
335	340	345
Cys Pro Glu Gly Tyr Ile Cys Val Lys	Ala Gly Arg Asn Pro Asn	
350	355	360
Tyr Gly Tyr Thr Ser Phe Asp Thr Phe	Ser Trp Ala Phe Leu Ser	
365	370	375

Leu Phe Arg Leu Met Thr Gln Asp Tyr Trp Glu Asn Leu Tyr Gln	380	385	390
Leu Thr Leu Arg Ala Ala Gly Lys Thr Tyr Met Ile Phe Phe Val	395	400	405
Leu Val Ile Phe Leu Gly Ser Phe Tyr Leu Val Asn Leu Ile Leu	410	415	420
Ala Val Val Ala Met Ala Tyr Glu Glu Gln Asn Gln Ala Thr Leu	425	430	435
Glu Glu Ala Glu Gln Lys Glu Ala Glu Phe Gln Gln Met Leu Glu	440	445	450
Gln Leu Lys Lys Gln Gln Glu Glu Ala Gln Ala Val Ala Ala Ala	455	460	465
Ser Ala Ala Ser Arg Asp Phe Ser Gly Val Gly Gly Leu Gly Glu	470	475	480
Leu Leu Glu Ser Ser Ser Glu Ala Ser Lys Leu Ser Ser Lys Gly	485	490	495
Ala Lys Glu Trp Arg Asn Arg Arg Lys Lys Arg Arg Gln Arg Glu	500	505	510
His Leu Glu Gly Asn Asn Lys Gly Glu Arg Asp Ser Phe Pro Lys	515	520	525
Ser Glu Ser Glu Asp Ser Val Lys Arg Ser Ser Phe Leu Phe Ser	530	535	540
Met Asp Gly Asn Arg Leu Thr Ser Asp Lys Lys Phe Cys Ser Pro	545	550	555
His Gln Ser Leu Leu Ser Ile Arg Gly Ser Leu Phe Ser Pro Arg	560	565	570
Arg Asn Ser Lys Thr Ser Ile Phe Ser Phe Arg Gly Arg Ala Lys	575	580	585
Asp Val Gly Ser Glu Asn Asp Phe Ala Asp Asp Glu His Ser Thr	590	595	600
Phe Glu Asp Ser Glu Ser Arg Arg Asp Ser Leu Phe Val Pro His	605	610	615
Arg His Gly Glu Arg Arg Asn Ser Asn Gly Thr Thr Thr Glu Thr	620	625	630
Glu Val Arg Lys Arg Arg Leu Ser Ser Tyr Gln Ile Ser Met Glu	635	640	645
Met Leu Glu Asp Ser Ser Gly Arg Gln Arg Ala Val Ser Ile Ala	650	655	660
Ser Ile Leu Thr Asn Thr Met Glu Glu Leu Glu Glu Ser Arg Gln			



665										670					675				
Lys	Cys	Pro	Pro	Cys	Trp	Tyr	Arg	Phe	Ala	Asn	Val	Phe	Leu	Ile					
				680					685					690					
Trp	Asp	Cys	Cys	Asp	Ala	Trp	Leu	Lys	Val	Lys	His	Leu	Val	Asn					
				695					700					705					
Leu	Ile	Val	Met	Asp	Pro	Phe	Val	Asp	Leu	Ala	Ile	Thr	Ile	Cys					
				710					715					720					
Ile	Val	Leu	Asn	Thr	Leu	Phe	Met	Ala	Met	Glu	His	Tyr	Pro	Met					
				725					730					735					
Thr	Glu	Gln	Phe	Ser	Ser	Val	Leu	Thr	Val	Gly	Asn	Leu	Val	Phe					
				740					745					750					
Thr	Gly	Ile	Phe	Thr	Ala	Glu	Met	Val	Leu	Lys	Ile	Ile	Ala	Met					
				755					760					765					
Asp	Pro	Tyr	Tyr	Tyr	Phe	Gln	Glu	Gly	Trp	Asn	Ile	Phe	Asp	Gly					
				770					775					780					
Ile	Ile	Val	Ser	Leu	Ser	Leu	Met	Glu	Leu	Gly	Leu	Ser	Asn	Val					
				785					790					795					
Glu	Gly	Leu	Ser	Val	Leu	Arg	Ser	Phe	Arg	Leu	Leu	Arg	Val	Phe					
				800					805					810					
Lys	Leu	Ala	Lys	Ser	Trp	Pro	Thr	Leu	Asn	Met	Leu	Ile	Lys	Ile					
				815					820					825					
Ile	Gly	Asn	Ser	Val	Gly	Ala	Leu	Gly	Asn	Leu	Thr	Leu	Val	Leu					
				830					835					840					
Ala	Ile	Ile	Val	Phe	Ile	Phe	Ala	Val	Val	Gly	Met	Gln	Leu	Phe					
				845					850					855					
Gly	Lys	Ser	Tyr	Lys	Glu	Cys	Val	Cys	Lys	Ile	Asn	Asp	Asp	Cys					
				860					865					870					
Thr	Leu	Pro	Arg	Trp	His	Met	Asn	Asp	Phe	Phe	His	Ser	Phe	Leu					
				875					880					885					
Ile	Val	Phe	Arg	Val	Leu	Cys	Gly	Glu	Trp	Ile	Glu	Thr	Met	Trp					
				890					895					900					
Asp	Cys	Met	Glu	Val	Ala	Gly	Gln	Thr	Met	Cys	Leu	Ile	Val	Phe					
				905					910					915					
Met	Leu	Val	Met	Val	Ile	Gly	Asn	Leu	Val	Val	Leu	Asn	Leu	Phe					
				920					925					930					
Leu	Ala	Leu	Leu	Leu	Ser	Ser	Phe	Ser	Ser	Asp	Asn	Leu	Ala	Ala					
				935					940					945					
Thr	Asp	Asp	Asp	Asn	Glu	Met	Asn	Asn	Leu	Gln	Ile	Ala	Val	Gly					
				950					955					960					

Arg Met Gln Lys Gly Ile Asp Tyr Val Lys Asn Lys Met Arg Glu	965	970	975
Cys Phe Gln Lys Ala Phe Phe Arg Lys Pro Lys Val Ile Glu Ile	980	985	990
His Glu Gly Asn Lys Ile Asp Ser Cys Met Ser Asn Asn Thr Gly	995	1000	1005
Ile Glu Ile Ser Lys Glu Leu Asn Tyr Leu Arg Asp Gly Asn Gly	1010	1015	1020
Thr Thr Ser Gly Val Gly Thr Gly Ser Ser Val Glu Lys Tyr Val	1025	1030	1035
Ile Asp Glu Asn Asp Tyr Met Ser Phe Ile Asn Asn Pro Ser Leu	1040	1045	1050
Thr Val Thr Val Pro Ile Ala Val Gly Glu Ser Asp Phe Glu Asn	1055	1060	1065
Leu Asn Thr Glu Glu Phe Ser Ser Glu Ser Glu Leu Glu Glu Ser	1070	1075	1080
Lys Glu Lys Leu Asn Ala Thr Ser Ser Ser Glu Gly Ser Thr Val	1085	1090	1095
Asp Val Val Leu Pro Arg Glu Gly Glu Gln Ala Glu Thr Glu Pro	1100	1105	1110
Glu Glu Asp Phe Lys Pro Glu Ala Cys Phe Thr Glu Gly Cys Ile	1115	1120	1125
Lys Lys Phe Pro Phe Cys Gln Val Ser Thr Glu Glu Gly Lys Gly	1130	1135	1140
Lys Ile Trp Trp Asn Leu Arg Lys Thr Cys Tyr Ser Ile Val Glu	1145	1150	1155
His Asn Trp Phe Glu Thr Phe Ile Val Phe Met Ile Leu Leu Ser	1160	1165	1170
Ser Gly Ala Leu Ala Phe Glu Asp Ile Tyr Ile Glu Gln Arg Lys	1175	1180	1185
Thr Ile Lys Thr Met Leu Glu Tyr Ala Asp Lys Val Phe Thr Tyr	1190	1195	1200
Ile Phe Ile Leu Glu Met Leu Leu Lys Trp Val Ala Tyr Gly Phe	1205	1210	1215
Gln Thr Tyr Phe Thr Asn Ala Trp Cys Trp Leu Asp Phe Leu Ile	1220	1225	1230
Val Asp Val Ser Leu Val Ser Leu Val Ala Asn Ala Leu Gly Tyr	1235	1240	1245
Ser Glu Leu Gly Ala Ile Lys Ser Leu Arg Thr Leu Arg Ala Leu			

1250	1255	1260
Arg Pro Leu Arg Ala Leu Ser Arg Phe Glu Gly Met Arg Val Val		
1265	1270	1275
Val Asn Ala Leu Val Gly Ala Ile Pro Ser Ile Met Asn Val Leu		
1280	1285	1290
Leu Val Cys Leu Ile Phe Trp Leu Ile Phe Ser Ile Met Gly Val		
1295	1300	1305
Asn Leu Phe Ala Gly Lys Phe Tyr His Cys Val Asn Met Thr Thr		
1310	1315	1320
Gly Asn Met Phe Asp Ile Ser Asp Val Asn Asn Leu Ser Asp Cys		
1325	1330	1335
Gln Ala Leu Gly Lys Gln Ala Arg Trp Lys Asn Val Lys Val Asn		
1340	1345	1350
Phe Asp Asn Val Gly Ala Gly Tyr Leu Ala Leu Leu Gln Val Ala		
1355	1360	1365
Thr Phe Lys Gly Trp Met Asp Ile Met Tyr Ala Ala Val Asp Ser		
1370	1375	1380
Arg Asp Val Lys Leu Gln Pro Val Tyr Glu Glu Asn Leu Tyr Met		
1385	1390	1395
Tyr Leu Tyr Phe Val Ile Phe Ile Ile Phe Gly Ser Phe Phe Thr		
1400	1405	1410
Leu Asn Leu Phe Ile Gly Val Ile Ile Asp Asn Phe Asn Gln Gln		
1415	1420	1425
Lys Lys Lys Phe Gly Gly Gln Asp Ile Phe Met Thr Glu Glu Gln		
1430	1435	1440
Lys Lys Tyr Tyr Asn Ala Met Lys Lys Leu Gly Ser Lys Lys Pro		
1445	1450	1455
Gln Lys Pro Ile Pro Arg Pro Ala Asn Lys Phe Gln Gly Met Val		
1460	1465	1470
Phe Asp Phe Val Thr Arg Gln Val Phe Asp Ile Ser Ile Met Ile		
1475	1480	1485
Leu Ile Cys Leu Asn Met Val Thr Met Met Val Glu Thr Asp Asp		
1490	1495	1500
Gln Gly Lys Tyr Met Thr Leu Val Leu Ser Arg Ile Asn Leu Val		
1505	1510	1515
Phe Ile Val Leu Phe Thr Gly Glu Phe Val Leu Lys Leu Val Ser		
1520	1525	1530
Leu Arg His Tyr Tyr Phe Thr Ile Gly Trp Asn Ile Phe Asp Phe		
1535	1540	1545

Val Val Val Ile Leu Ser Ile Val Gly Met Phe Leu Ala Glu Met	1550	1555	1560
Ile Glu Lys Tyr Ser Val Ser Pro Thr Leu Phe Arg Val Ile Arg	1565	1570	1575
Leu Ala Arg Ile Gly Arg Ile Leu Arg Leu Ile Lys Gly Ala Lys	1580	1585	1590
Gly Ile Arg Thr Leu Leu Phe Ala Leu Met Met Ser Leu Pro Ala	1595	1600	1605
Leu Phe Asn Ile Gly Leu Leu Leu Phe Leu Val Met Phe Ile Tyr	1610	1615	1620
Ala Ile Phe Gly Met Ser Asn Phe Ala Tyr Val Lys Lys Glu Ala	1625	1630	1635
Gly Ile Asp Asp Met Phe Asn Phe Glu Thr Phe Gly Asn Ser Met	1640	1645	1650
Ile Cys Leu Phe Gln Ile Thr Thr Ser Ala Gly Trp Asp Gly Leu	1655	1660	1665
Leu Ala Pro Ile Leu Asn Ser Ala Pro Pro Asp Cys Asp Pro Asp	1670	1675	1680
Thr Ile His Pro Gly Ser Ser Val Lys Gly Asp Arg Gly Asp Pro	1685	1690	1695
Ser Val Gly Ile Phe Phe Phe Val Ser Tyr Ile Ile Ile Ser Phe	1700	1705	1710
Leu Val Val Val Asn Met Tyr Ile Ala Val Ile Leu Glu Asn Phe	1715	1720	1725
Ser Val Ala Thr Glu Glu Ser Ala Glu Pro Leu Ser Glu Asp Asp	1730	1735	1740
Phe Glu Met Phe Tyr Glu Val Trp Glu Lys Phe Asp Pro Asp Ala	1745	1750	1755
Thr Gln Phe Ile Glu Phe Ser Lys Leu Ser Asp Phe Ala Ala Ala	1760	1765	1770
Leu Asp Pro Pro Leu Leu Ile Ala Lys Pro Asn Lys Val Gln Leu	1775	1780	1785
Ile Ala Met Asp Leu Pro Met Val Ser Gly Asp Arg Ile His Cys	1790	1795	1800
Leu Asp Ile Leu Phe Ala Phe Thr Lys Arg Val Leu Cys Glu Ser	1805	1810	1815
Gly Glu Met Asp Ala Leu Arg Ile Gln Met Glu Asp Arg Phe Met	1820	1825	1830
Ala Ser Asn Pro Ser Lys Val Ser Tyr Glu Pro Ile Thr Thr Thr			

1835	1840	1845
Leu Lys Arg Lys Gln Glu Glu Val Ser Ala Ala Ile Ile Gln Arg		
1850	1855	1860
Asn Phe Arg Cys Tyr Leu Leu Lys Gln Arg Leu Lys Asn Ile Ser		
1865	1870	1875
Ser Asn Tyr Asn Lys Glu Ala Ile Lys Gly Arg Ile Asp Leu Pro		
1880	1885	1890
Ile Lys Gln Asp Met Ile Ile Asp Lys Leu Asn Gly Asn Ser Thr		
1895	1900	1905
Pro Glu Lys Thr Asp Gly Ser Ser Ser Thr Thr Ser Pro Pro Ser		
1910	1915	1920
Tyr Asp Ser Val Thr Lys Pro Asp Lys Glu Lys Phe Glu Lys Asp		
1925	1930	1935
Lys Pro Glu Lys Glu Ser Lys Gly Lys Glu Val Arg Glu Asn Gln		
1940	1945	1950

Lys

<210> 157  
 <211> 380  
 <212> PRT  
 <213> Homo sapien

<400> 157

Met Gly Ala Ala Ala Gln Ala Pro Leu Gly Leu Pro Ala Ala		
1 5 10 15		
Ser Ala Arg Leu Leu Leu Leu Ala Thr Ser Val Leu Leu Leu Phe		
20 25 30		
Ala Phe Ser Leu Pro Gly Ser Arg Ala Ser Asn Gln Pro Pro Gly		
35 40 45		
Gly Gly Gly Gly Thr Gly Gly Asp Cys Pro Gly Gly Lys Gly Lys		
50 55 60		
Ser Ile Asn Cys Ser Glu Leu Asn Val Arg Glu Ser Asp Val Arg		
65 70 75		
Val Cys Asp Glu Ser Ser Cys Lys Tyr Gly Gly Val Cys Lys Glu		
80 85 90		
Asp Gly Asp Gly Leu Lys Cys Ala Cys Gln Phe Gln Cys His Thr		
95 100 105		
Asn Tyr Ile Pro Val Cys Gly Ser Asn Gly Asp Thr Tyr Gln Asn		
110 115 120		
Glu Cys Phe Leu Arg Arg Ala Ala Cys Lys His Gln Lys Glu Ile		
125 130 135		

Thr	Val	Ile	Ala	Arg	Gly	Pro	Cys	Tyr	Ser	Asp	Asn	Gly	Ser	Gly		140	145	150
Ser	Gly	Glu	Gly	Glu	Glu	Glu	Gly	Ser	Gly	Ala	Glu	Val	His	Arg		155	160	165
Lys	His	Ser	Lys	Cys	Gly	Pro	Cys	Lys	Tyr	Lys	Ala	Glu	Cys	Asp		170	175	180
Glu	Asp	Ala	Glu	Asn	Val	Gly	Cys	Val	Cys	Asn	Ile	Asp	Cys	Ser		185	190	195
Gly	Tyr	Ser	Phe	Asn	Pro	Val	Cys	Ala	Ser	Asp	Gly	Ser	Ser	Tyr		200	205	210
Asn	Asn	Pro	Cys	Phe	Val	Arg	Glu	Ala	Ser	Cys	Ile	Lys	Gln	Glu		215	220	225
Gln	Ile	Asp	Ile	Arg	His	Leu	Gly	His	Cys	Thr	Asp	Thr	Asp	Asp		230	235	240
Thr	Ser	Leu	Leu	Gly	Lys	Lys	Asp	Asp	Gly	Leu	Gln	Tyr	Arg	Pro		245	250	255
Asp	Val	Lys	Asp	Ala	Ser	Asp	Gln	Arg	Glu	Asp	Val	Tyr	Ile	Gly		260	265	270
Asn	His	Met	Pro	Cys	Pro	Glu	Asn	Leu	Asn	Gly	Tyr	Cys	Ile	His		275	280	285
Gly	Lys	Cys	Glu	Phe	Ile	Tyr	Leu	Leu	Arg	Arg	Ala	Ser	Cys	Arg		290	295	300
Cys	Glu	Ser	Gly	Tyr	Thr	Gly	Gln	His	Cys	Glu	Lys	Thr	Asp	Phe		305	310	315
Ser	Ile	Leu	Tyr	Val	Val	Pro	Ser	Arg	Gln	Lys	Leu	Thr	His	Val		320	325	330
Leu	Ile	Ala	Ala	Ile	Ile	Gly	Ala	Val	Gln	Ile	Ala	Ile	Ile	Val		335	340	345
Ala	Ile	Val	Met	Cys	Ile	Thr	Arg	Lys	Cys	Pro	Lys	Asn	Asn	Arg		350	355	360
Gly	Arg	Arg	Gln	Lys	Gln	Asn	Leu	Gly	His	Phe	Thr	Ser	Asp	Thr		365	370	375
Ser	Ser	Arg	Met	Val												380		

<210> 158  
 <211> 341  
 <212> PRT  
 <213> Homo sapien

<400> 158  
 Met Leu Pro Glu Gln Leu Tyr Phe Leu Gln Ser Pro Pro Glu Glu

1	5	10	15
Glu Pro Glu Tyr His	Pro Asp Ala Ser	Ala Gln Glu Leu Asn	Val
20	25	30	
Arg Glu Ser Asp Val	Arg Val Cys Asp	Glu Ser Ser Cys Lys	Tyr
35	40	45	
Gly Gly Val Cys Lys	Glu Asp Gly Asp	Gly Leu Lys Cys Ala	Cys
50	55	60	
Gln Phe Gln Cys His	Thr Asn Tyr Ile	Pro Val Cys Gly Ser	Asn
65	70	75	
Gly Asp Thr Tyr Gln	Asn Glu Cys Phe	Leu Arg Arg Ala Ala	Cys
80	85	90	
Lys His Gln Lys Glu	Ile Thr Val Ile	Ala Arg Gly Pro Cys	Tyr
95	100	105	
Ser Asp Asn Gly Ser	Gly Ser Gly Glu	Gly Glu Glu Glu Gly	Ser
110	115	120	
Gly Ala Glu Val His	Arg Lys His Ser	Lys Cys Gly Pro Cys	Lys
125	130	135	
Tyr Lys Ala Glu Cys	Asp Glu Asp Ala	Glu Asn Val Gly Cys	Val
140	145	150	
Cys Asn Ile Asp Cys	Ser Gly Tyr Ser	Phe Asn Pro Val Cys	Ala
155	160	165	
Ser Asp Gly Ser Ser	Tyr Asn Asn Pro	Cys Phe Val Arg Glu	Ala
170	175	180	
Ser Cys Ile Lys Gln	Glu Gln Ile Asp	Ile Arg His Leu Gly	His
185	190	195	
Cys Thr Asp Thr Asp	Asp Thr Ser Leu	Leu Gly Lys Lys Asp	Asp
200	205	210	
Gly Leu Gln Tyr Arg	Pro Asp Val Lys	Asp Ala Ser Asp Gln	Arg
215	220	225	
Glu Asp Val Tyr Ile	Gly Asn His Met	Pro Cys Pro Glu Asn	Leu
230	235	240	
Asn Gly Tyr Cys Ile	His Gly Lys Cys	Glu Phe Ile Tyr Ser	Thr
245	250	255	
Gln Lys Ala Ser Cys	Arg Cys Glu Ser	Gly Tyr Thr Gly Gln	His
260	265	270	
Cys Glu Lys Thr Asp	Phe Ser Ile Leu	Tyr Val Val Pro Ser	Arg
275	280	285	
Gln Lys Leu Thr His	Val Leu Ile Ala	Ala Ile Ile Gly Ala	Val
290	295	300	

Gln Ile Ala Ile Ile Val Ala Ile Val Met Cys Ile Thr Arg Lys  
305 310 315

Cys Pro Lys Asn Asn Arg Gly Arg Arg Gln Lys Gln Asn Leu Gly  
320 325 330

His Phe Thr Ser Asp Thr Ser Ser Arg Met Val  
335 340